

File 350:Derwent WPIX 1963-2000/UD,UM &UP=200107  
(c) 2001 Derwent Info Ltd  
File 344:CHINESE PATENTS ABS APR 1985-2001/JAN  
(c) 2001 EUROPEAN PATENT OFFICE  
File 347:JAPIO Oct 1976-2000/Jul (UPDATED 001114)  
(c) 2000 JPO & JAPIO  
File 348:EUROPEAN PATENTS 1978-2000/Jan W04  
(c) 2001 European Patent Office  
File 349:PCT Fulltext 1983-2001/UB=20010201, UT=20010118  
(c) 2001 WIPO/MicroPat

Set	Items	Description
S1	17	PA=CIGN?
S2	77	AU=FENTON D?
S3	2474871	INSUR? OR APPLICAT? OR USER?
S4	24	S2 AND S3
S5	24	IDPAT (sorted in duplicate/non-duplicate order)
S6	19	IDPAT (primary/non-duplicate records only)
S7	4	AU=TRAYNOR J?
S8	4	IDPAT (sorted in duplicate/non-duplicate order)
S9	2	IDPAT (primary/non-duplicate records only)
S10	15	AU=SILVER E?
S11	15	S10 NOT (S2 OR S7)
S12	15	IDPAT (sorted in duplicate/non-duplicate order)
S13	10	IDPAT (primary/non-duplicate records only)
S14	0	AU=CARFAGNO K?
S15	9	AU=WEAVER C A?
S16	9	IDPAT (sorted in duplicate/non-duplicate order)
S17	0	S1 AND (S2 OR S7 OR S10 OR S15)

6/3,AB/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01128032

**Photographic material having enhanced light absorption**  
**Photographisches Material mit erhoelter Lichtabsorption**  
**Produit photographique avec une absorption amelioree de lumiere**

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (Applicant designated States: all)

INVENTOR:

Deaton, Joseph C., c/o Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)  
Parton, Richard L., c/o Eastman Kodak Company, Patent Legal Staff, 343  
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Penner, Thomas L., c/o Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)  
Harrison, William J., c/o Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)  
**Fenton, David E., c/o Eastman Kodak Company**, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Nunney, Ronald Frederick Adolphe et al (34412), Kodak Limited, Patents,  
W92-3A, Headstone Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 985964 A1 000315 (Basic)

APPLICATION (CC, No, Date): EP 99202801 990830;

PRIORITY (CC, No, Date): US 151977 980911

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G03C-001/29; G03C-001/005; G03C-001/035

ABSTRACT EP 985964 A1

This invention comprises a silver halide photographic material  
comprising at least one silver halide emulsion comprising tabular silver  
halide grains having associated therewith at least two dye layers  
comprising

(a) an inner dye layer adjacent to the silver halide grain and  
comprising at least one dye that is capable of spectrally sensitizing  
silver halide and

(b) an outer dye layer adjacent to the inner dye layer and comprising  
at least one dye, wherein the dye layers are held together by  
non-covalent forces or by in situ bond formation; the outer dye layer  
adsorbs light at equal or higher energy than the inner dye layer; and the  
energy emission wavelength of the outer dye layer overlaps with the  
energy absorption wavelength of the inner dye layer.

This invention also comprises a silver halide emulsion comprising  
silver halide tabular grains sensitized with at least one dye containing  
at least one anionic substituent and at least one dye containing at least  
one cationic substituent provides increased light absorption.

ABSTRACT WORD COUNT: 168

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200011	796
SPEC A	(English)	200011	15719
Total word count - document A			16515
Total word count - document B			0
Total word count - documents A + B			16515

6/3,AB/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01024536

**CANDY DISPENSER**

**DISTRIBUTEUR DE BONBONS**

**PATENT ASSIGNEE:**

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(Applicant designated States: all)

**INVENTOR:**

**Fenton, Darryl, D.** , P.O. Box 874628,, Wasilla, AK 99687, (US)  
**PATENT (CC, No, Kind, Date):**

WO 9904658 990204

**APPLICATION (CC, No, Date):** WO 97937030 970728; WO 97US13112 970728

**DESIGNATED STATES:** AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

**INTERNATIONAL PATENT CLASS:** A24F-015/04; B65G-059/00

**LANGUAGE (Publication,Procedural,Application):** English; English; English

**6/3,AB/3 (Item 3 from file: 348)**

**DIALOG(R)File 348:EUROPEAN PATENTS**

(c) 2001 European Patent Office. All rts. reserv.

00972341

**Preparation and use of a dimethylamine silver bromide complex as a single  
source precursor for nucleation of silver bromide crystals**

**Herstellung einer Dimethylamin-Silberbromid-Komplexverbindung und deren  
Verwendung als einzige Quelle für die Keimbildung von  
Silberbromidkristallen**

**Preparation d'un complexe de dimethylamine et bromure d'argent et son  
utilisation comme source unique pour la nucleation de cristaux de  
bromure d'argent**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

**INVENTOR:**

Royster, Tommie L., Jr., Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)

**Fenton, David E.**, c/o Eastman Kodak Company , Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)

Jagannathan, Seshadri, c/o Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)

Tiberio, Joseph J., c/o Eastman Kodak Company, Patent Legal Staff, 343  
State Street, Rochester, New York 14650-2201, (US)

**LEGAL REPRESENTATIVE:**

Parent, Yves et al (17684), KODAK INDUSTRIE, Departement Brevets, CRT -  
Zone Industrielle, 71102 Chalon-sur-Saone Cedex, (FR)

**PATENT (CC, No, Kind, Date):** EP 881534 A1 981202 (Basic)

**APPLICATION (CC, No, Date):** EP 98201645 980518;

**PRIORITY (CC, No, Date):** US 866855 970530

**DESIGNATED STATES:** DE; FR; GB; IT

**INTERNATIONAL PATENT CLASS:** G03C-001/015; C07F-001/00;

**ABSTRACT EP 881534 A1**

A dimethylamine silver bromide complex is used as a single source  
precursor for nucleation of silver bromide crystals.

**ABSTRACT WORD COUNT:** 19

**LANGUAGE (Publication,Procedural,Application):** English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	205
SPEC A	(English)	9849	1783
Total word count - document A			1988
Total word count - document B			0
Total word count - documents A + B			1988

**6/3,AB/4 (Item 4 from file: 348)**

**DIALOG(R)File 348:EUROPEAN PATENTS**

(c) 2001 European Patent Office. All rts. reserv.

00972336

Preparation and use of a dimethylamine silver bromo-iodide complex as a single source precursor for iodide incorporation in silver bromide crystals

Herstellung einer Dimethylamin-Silberbromojodid-Komplexverbindung und deren Verwendung als einzige Quelle für die Einbringung von Jodid in Silberbromidkristalle

Preparation d'un complexe de dimethylamine et bromure d'argent et son utilisation comme unique source pour l'incorporation d'iodure dans des cristaux de brom

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York 14650, (US), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Royster, Tommie L., Jr., Eastman Kodak Company, Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

Jagannathan, Seshadri, c/o Eastman Kodak Company, Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

Fenton, David E., c/o Eastman Kodak Company, Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

Chen, Samuel, c/o Eastman Kodak Company, Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 881532 A1 981202 (Basic)

APPLICATION (CC, No, Date): EP 98201614 980518;

PRIORITY (CC, No, Date): US 865753 970530

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G03C-001/015; C07F-001/00;

ABSTRACT EP 881532 A1

A dimethylamine silver bromo-iodide complex is used as a single source precursor for iodide incorporation in silver bromide crystals.

ABSTRACT WORD COUNT: 20

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9849	140
SPEC A	(English)	9849	2027
Total word count - document A			2167
Total word count - document B			0
Total word count - documents A + B			2167

6/3,AB/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00775286

TABULAR GRAIN EMULSIONS WITH SELECTED SITE HALIDE CONVERSIONS AND PROCESSES FOR THEIR PREPARATION

TAFELKORNEMULSIONEN MIT HALOGENKONVERSION AN AUSGEWÄHLTEN KORNOBERFLÄCHENPLATZEN UND VERFAHREN ZU DEREN HERSTELLUNG

EMULSIONS A GRAINS TABULAIRES AVEC CONVERSIONS D'HALOGENURE SUR DES SITES SELECTIONNES ET PROCEDES DE PREPARATION DESDITES EMULSIONS

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York 14650, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

FENTON, David, Earl c/oEastman Kodak Co., Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

FOX, Lucius, Sieberling c/oEastman Kodak Co., Patent Legal Staff, 343 State Street, Rochester, New York 14650-2201, (US)

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Street, Rochester, New York 14650-2201, (US)  
Jagannathan, Seshadri c/oEastman Kodak Co., Patent Legal Staff, 343 State  
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Rochester, New York 14650-2201, (US)

**LEGAL REPRESENTATIVE:**

Haile, Helen Cynthia (60521), Kodak Limited Patent Department Headstone  
Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 737329 A1 961016 (Basic)  
WO 9613759 960509

APPLICATION (CC, No, Date): EP 95936216 951013; WO 95US12522 951013

PRIORITY (CC, No, Date): US 329591 941026; US 774 950630

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G03C-001/005;

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**6/3,AB/6 (Item 6 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00775143

**PHOTOGRAPHIC EMULSIONS OF ENHANCED SENSITIVITY**

**PHOTOGRAPHISCHE EMULSIONEN VON GESTEIGERTER EMPFINDLICHKEIT**

**EMULSIONS PHOTOGRAPHIQUES A SENSIBILITE RENFORCEE**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (applicant designated states: DE;FR;GB)

**INVENTOR:**

FENTON, David, Earl , 134 Selborne Chase, Fairport, NY 14450, (US)

FOX, Lucius, Seiberling, 38 Garden Drive, Fairport, NY 14450, (US)

BLACK, Donald, Lee, 803 Hightower Way, Webster, NY 14580, (US)

BRYANT, Roger, Anthony, 214 Stone Fence Road, Rochester, NY 14626, (US)

OLM, Myra, Toffoln, 181 Wycliff Drive, Webster, NY 14580, (US)

**LEGAL REPRESENTATIVE:**

Haile, Helen Cynthia (60521), Kodak Limited Patent Department Headstone  
Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 736200 A1 961009 (Basic)  
EP 736200 B1 980513  
WO 9613757 960509

APPLICATION (CC, No, Date): EP 95935226 951013; WO 95US12521 951013

PRIORITY (CC, No, Date): US 329591 941026; US 723 950630

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G03C-001/005; G03C-001/07; G03C-001/12;

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9820	416
CLAIMS B	(German)	9820	371
CLAIMS B	(French)	9820	443
SPEC B	(English)	9820	11428
Total word count - document A			0
Total word count - document B			12658
Total word count - documents A + B			12658

**6/3,AB/7 (Item 7 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00775142

**RADIOGRAPHIC ELEMENTS FOR MEDICAL DIAGNOSTIC IMAGING EXHIBITING IMPROVED  
SPEED-GRANULARITY CHARACTERISTICS**

**RADIOGRAPHISCHE ELEMENTE FUR DIE MEDIZINISCH-DIAGNOSTISCHE**

**BILDAUFZEICHNUNG, DIE EINE VERBESSERTE EMPFINDLICHKEITS-KORNIKKEITS-CHARAKTERISTIK AUFWEISEN**  
**ELEMENTS RADIOGRAPHIQUES POUR IMAGERIE MEDICALE DE DIAGNOSTIC PRESENTANT DES CARACTERISTIQUES VITESSE-GRANULATION AMELIOREES**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (applicant designated states: DE;FR;GB)

**INVENTOR:**

FENTON, David, Earl , 134 Selborne Chase, Fairport, NY 14450, (US)  
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BLACK, Donald, Lee, 803 Hightower Way, Webster, NY 14580, (US)

**LEGAL REPRESENTATIVE:**

Haile, Helen Cynthia (60521), Kodak Limited Patent Department Headstone  
Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 736199 A1 961009 (Basic)

EP 736199 B1 980513

WO 9613756 960509

APPLICATION (CC, No, Date): EP 95935225 951013; WO 95US12520 951013

PRIORITY (CC, No, Date): US 329591 941026; US 536898 950929

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G03C-001/005; G03C-005/17; G03C-001/46;

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9820	263
CLAIMS B	(German)	9820	224
CLAIMS B	(French)	9820	345
SPEC B	(English)	9820	7314
Total word count - document A			0
Total word count - document B			8146
Total word count - documents A + B			8146

6/3,AB/8 (Item 8 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00775141

**PHOTOGRAPHIC EMULSIONS OF ENHANCED SENSITIVITY**  
**PHOTOGRAPHISCHE EMULSIONEN VON GESTEIGERTER EMPFINDLICHKEIT**  
**EMULSIONS PHOTOGRAPHIQUES A SENSIBILITE RENFORCEE**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (applicant designated states: DE;FR;GB)

**INVENTOR:**

FENTON, David, Earl , 134 Selborne Chase, Fairport, NY 14450, (US)  
FOX, Lucius, Seiberling, 38 Garden Drive, Fairport, NY 14450, (US)  
BLACK, Donald, Lee, 803 Hightower Way, Webster, NY 14580, (US)

**LEGAL REPRESENTATIVE:**

Haile, Helen Cynthia (60521), Kodak Limited Patent Department Headstone  
Drive, Harrow, Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 736198 A1 961009 (Basic)

EP 736198 B1 980513

WO 9613755 960509

APPLICATION (CC, No, Date): EP 95935224 951013; WO 95US12519 951013

PRIORITY (CC, No, Date): US 329591 941026

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G03C-001/005;

**NOTE:**

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9820	232
CLAIMS B	(German)	9820	185
CLAIMS B	(French)	9820	258

SPEC B (English) 9820 4637  
Total word count - document A 0  
Total word count - document B 5312  
Total word count - documents A + B 5312

6/3,AB/9 (Item 9 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2001 European Patent Office. All rts. reserv.

00661671

**Tabular grain silver iodobromide emulsion of improved sensitivity and process for its preparation**  
**Silberjodobromidemulsion aus tafelformigen Kornern mit verbesserter Empfindlichkeit und Verfahren zu ihrer Herstellung**  
**Emulsion a grains tabulaires d'iodobromure d'argent a sensibilite amelioree et procede pour sa preparation**

**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York .  
14650-2201, (US), (Proprietor designated states: all)

**INVENTOR:**

Chaffee, Eleanor, c/o Eastman Kodak Company, 343 State Street, Rochester, New York 14650-2201, (US)

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Tsaur, Allen Keh-Chang, c/o EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York 14650-2201, (US)

**Fenton, David Earl** , c/o EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York 14650-2201, (US)

Black, Donald Lee, c/o EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York 14650-2201, (US)

**LEGAL REPRESENTATIVE:**

Parent, Yves et al (17681), KODAK INDUSTRIE Departement Brevets - CRT  
Zone Industrielle B.P. 21, 71102 Chalon-sur-Saone Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 635755 A1 950125 (Basic)  
EP 635755 B1 000816

APPLICATION (CC, No, Date): EP 94420182 940629;

PRIORITY (CC, No, Date): US 96104 930722

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G03C-001/005

**ABSTRACT EP 635755 A1**

Silver iodobromide tabular grain emulsions of enhanced photographic sensitivity are disclosed. The silver iodobromide grains contain from 2 to less than 10 mole percent iodide, exhibit a coefficient of variation of less than 20 percent, and consisting essentially of tabular grains having opposed parallel major faces. Each of the tabular silver bromoiodide grains exhibit an iodide concentration in excess of 6 mole percent within a surface region extending to a depth of less than 0.02 (mu)m and exhibit a central iodide concentration of less than 2 mole percent.

The tabular grain emulsion is prepared by providing within a reaction vessel a population of silver bromide or iodobromide host grains exhibiting a coefficient of variation of less than 20 percent and containing less than 2 mole percent iodide consisting essentially of tabular grains and introducing silver, bromide and iodide ions into the reaction vessel for deposition onto the major faces on the host tabular grains, with iodide ions accounting for at least 25 mole percent of total halide ions introduced. (see image in original document)

ABSTRACT WORD COUNT: 176

**NOTE:**

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200033	661
CLAIMS B	(German)	200033	585

CLAIMS B	(French)	200033	697
SPEC B	(English)	200033	5694
Total word count	- document A		0
Total word count	- document B		7637
Total word count	- documents A + B		7637

6/3,AB/10 (Item 10 from file: 348)  
 DIALOG(R)File 348:EUROPEAN PATENTS  
 (c) 2001 European Patent Office. All rts. reserv.

00569976

Color film with closely matched acutance between different color records  
 Farbfilm mit gut angepassten Konturenscharfen zwischen den Verschiedenen  
 Farbaufzeichnungen  
 Film couleur a nettete bien adaptee entre les differentes reproductions  
 couleurs

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York  
 14650-2201, (US), (Proprietor designated states: all)

INVENTOR:

Fenton, David Earl, c/o Eastman Kodak Company, Patent Department, 343  
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 Sawyer, John Frank, c/o Eastman Kodak Company, Patent Department, 343  
 State Street, Rochester, New York 14650-2201, (US)  
 Hunger, Donald Henry, c/o Eastman Kodak Company, Patent Department, 343  
 State Street, Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Nunney, Ronald Frederick Adolphe et al (34411), Kodak Limited Patent  
 Department Headstone Drive, Harrow Middlesex HA1 4TY, (GB)

PATENT (CC, No, Kind, Date): EP 575006 A2 931222 (Basic)  
 EP 575006 A3 950322  
 EP 575006 B1 991027

APPLICATION (CC, No, Date): EP 93201732 930616;

PRIORITY (CC, No, Date): US 901605 920619

DESIGNATED STATES: GB

INTERNATIONAL PATENT CLASS: G03C-007/30

ABSTRACT EP 575006 A2

A color photographic silver halide negative working duplicating element comprising a support bearing, in order from the support, at least one red-sensitive photographic silver halide emulsion layer package comprising at least one cyan image-dye forming coupler that is capable upon exposure and processing of forming a cyan image dye that absorbs in the range of the original image; at least one green-sensitive photographic silver halide emulsion layer package comprising at least one magenta image-dye forming coupler that is capable, upon exposure and processing, of forming a magenta image dye that absorbs in the range of the original image; and at least one blue-sensitive photographic silver halide emulsion layer package comprising at least one yellow image-dye forming coupler that is capable upon exposure and processing of forming a yellow image dye that absorbs in the range of the original image. The silver halide particles in the fastest blue sensitive layer have an equivalent spherical diameter no greater than 0.3 microns, while in the remainder of the layers the silver halide particles have an equivalent spherical diameter of no greater than 0.23 microns. The silver level in the fastest blue sensitive layer is no greater than 30 mg/square foot. A sufficient red absorber is present so that the red record MTF(12) is at least 95% of the green record MTF(12) and the red record F50 is no more than 6 cylces/mm less than the green record F50.

ABSTRACT WORD COUNT: 237

LANGUAGE (Publication,Procedural,Application): English; English; English  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9943	418
CLAIMS B	(German)	9943	338
CLAIMS B	(French)	9943	474



SPEC B (English) 9943 4657  
Total word count - document A 0  
Total word count - document B 5887  
Total word count - documents A + B 5887

6/3,AB/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00550622

**Photographic elements with improved accutance**  
**Photographische Elemente verbesserter Scharfe**  
**Elements photographiques avec nettete amelioree**  
PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York  
14650-2201, (US), (applicant designated states:  
BE;CH;DE;FR;GB;IT;LI;NL)

INVENTOR:

Antoniades, Michael G., c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343  
State Street, Rochester New York 14650-2201, (US)  
Jagannathan, Ramesh, c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343  
State Street, Rochester New York 14650-2201, (US)  
Daubendiek, Richard Lee, c/o EASTMAN KODAK COMPANY, Patent Legal Staff  
343 State Street, Rochester New York 14650-2201, (US)  
**Fenton, David Earl, c/o EASTMAN KODAK COMPANY**, Patent Legal Staff 343  
State Street, Rochester New York 14650-2201, (US)  
Hall, Jeffrey Louis, c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343  
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LEGAL REPRESENTATIVE:

Parent, Yves et al (17681), KODAK INDUSTRIE Departement Brevets - CRT  
Zone Industrielle B.P. 21, 71102 Chalon-sur-Saone Cedex, (FR)  
PATENT (CC, No, Kind, Date): EP 507702 A1 921007 (Basic)  
EP 507702 B1 971008

APPLICATION (CC, No, Date): EP 92420095 920327;  
PRIORITY (CC, No, Date): US 679712 910403; US 679714 910403; US 842683  
920227

DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL  
INTERNATIONAL PATENT CLASS: G03C-001/46; G03C-007/30;

ABSTRACT EP 507702 A1

A photographic element is disclosed comprised of a support, a first  
silver halide emulsion layer responsive to minus blue (500 to 700 nm)  
light and a second silver halide emulsion layer positioned to overlie the  
first emulsion layer. In the second emulsion layer greater than 97  
percent of the total projected area of grains having an equivalent  
circular diameter of at least 0.2 (mu)m is accounted for by silver  
bromiodide tabular grains having an average equivalent circular diameter  
of at least 0.7 (mu)m and an average thickness of less than 0.07 (mu)m.  
(see image in original document)

ABSTRACT WORD COUNT: 99

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9710W1	638
CLAIMS B	(German)	9710W1	523
CLAIMS B	(French)	9710W1	660
SPEC B	(English)	9710W1	9031
Total word count - document A			0
Total word count - document B			10852
Total word count - documents A + B			10852

6/3,AB/12 (Item 12 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00550621

Highly uniform silver bromiodide tabular grain emulsions and processes for their preparation.

Emulsionen mit hochgleichformigen tafelformigen Silberbromiodidkornern und Verfahren zu ihrer Herstellung.

Emulsions a grains tabulaires de bromiodure d'argent hautement uniformes et procedes pour leur preparation.

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York 14650-2201, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

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Daubendiek, Richard Lee, c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343 State Street, Rochester New York 14650-2201, (US)

Fenton, David Earl, c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343 State Street, Rochester New York 14650-2201, (US)

Hall, Jeffrey Louis, c/o EASTMAN KODAK COMPANY, Patent Legal Staff 343 State Street, Rochester New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Parent, Yves et al (17681), Kodak-Pathe Departement Brevets et Licences Centre de Recherches et de Technologie Zone Industrielle, F-71102 Chalon-sur-Saone Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 507701 A1 921007 (Basic)

APPLICATION (CC, No, Date): EP 92420094 920327;

PRIORITY (CC, No, Date): US 679712 910403; US 679714 910403; US 842683 920227

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G03C-001/015; G03C-001/035;

ABSTRACT EP 507701 A1

Novel tabular grain emulsions and a process for their preparation are disclosed in which silver bromiodide tabular grains account for greater than 97 percent of total grain projected area and the coefficient of variation of the total grain population is less than 25 percent. This is achieved by forming in a first reaction vessel and transporting to a second reaction vessel a population of silver bromide grain nuclei in the form of regular octahedra having an equivalent circular diameter of less than 40 nanometers and a coefficient of variation of less than 50 percent and in the second reaction vessel converting the grain nuclei into a grain population containing parallel twin planes in more than 90 percent of the grains, so that upon further growth silver bromiodide tabular grains of desired properties can be realized. (see image in original document)

ABSTRACT WORD COUNT: 142

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1334
SPEC A	(English)	EPABF1	8172
Total word count - document A			9506
Total word count - document B			0
Total word count - documents A + B			9506

6/3,AB/13 (Item 13 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00475626

Color photographic silver halide duplicating element and process

Farbphotographische Silberhalogenid-Vervielfaltigungselemente sowie Verfahren

**Element photographique couleur copiant a l'halogenure d'argent et procede**  
**PATENT ASSIGNEE:**

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York  
14650-2201, (US), (applicant designated states: DE;GB;NL)

**INVENTOR:**

Sawyer, John Frank, c/o EASTMAN KODAK COMPANY, Patent Department, 343  
State Street, Rochester, New York 14650 - 2201, (US)

**Fenton, David Earl, c/o EASTMAN KODAK COMPANY**, Patent Department, 343  
State Street, Rochester, New York 14650 - 2201, (US)

**LEGAL REPRESENTATIVE:**

Brandes, Jurgen, Dr. rer. nat. et al (2381), Wuesthoff & Wuesthoff  
Patent- und Rechtsanwälte Schweigerstrasse 2, 81541 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 492443 A1 920701 (Basic)  
EP 492443 B1 970514

APPLICATION (CC, No, Date): EP 91121796 911219;

PRIORITY (CC, No, Date): US 631541 901221

DESIGNATED STATES: DE; GB; NL

INTERNATIONAL PATENT CLASS: G03C-007/32; G03C-007/333;

**ABSTRACT EP 492443 A1**

A color photographic silver halide negative working duplicating element and process comprising (A) a magenta colored masking coupler in at least one blue-sensitive photographic silver halide emulsion layer; and (B) a combination of (i) masking couplers and (ii) color contamination of at least one photographic silver halide emulsion layer enables upon exposure and processing of the element formation of a duplicate image that enables formation of a print image that is visually indistinguishable from the original image. The color photographic silver halide duplicating element is useful in forming duplicate images, especially for color motion picture films.

**ABSTRACT WORD COUNT: 98**

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB97	698
CLAIMS B	(German)	EPAB97	600
CLAIMS B	(French)	EPAB97	825
SPEC B	(English)	EPAB97	3821
Total word count - document A			0
Total word count - document B			5944
Total word count - documents A + B			5944

**6/3,AB/14 (Item 14 from file: 348)**

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2001 European Patent Office. All rts. reserv.

00431662

**Emission control system for a crankcase-scavenged two-stroke engine operating near idle.**

**Schadstoffregelungssystem fur einen Zweitaktmotor mit Kurbelgehauseespulung beim leerlaufnahen Bereich.**

**Systeme de commande d'emissions pour un moteur deux temps a balayage du carter de vilebrequin fonctionnant pres du ralenti.**

**PATENT ASSIGNEE:**

GENERAL MOTORS CORPORATION, (203111), General Motors Building 3044 West  
Grand Boulevard, Detroit Michigan 48202, (US), (applicant designated  
states: DE;FR;GB;IT)

**INVENTOR:**

Albertson, William Conrad, 14430 Rice Dr., Sterling Heights, Michigan  
48078, (US)

Reinke, Paul Edward, 1133 Springwood, Rochester, Michigan 48309, (US)

**Fenton, Donald Marion**, 4675 Oakvista Avenue, Drayton Plains, Michigan  
48020, (US)

Stiles, Steven Douglas, 6488 E. Church St., Clarkston, Michigan 48016,  
(US)

**LEGAL REPRESENTATIVE:**

Denton, Michael John et al (51983), Patent Section 1st Floor Gideon House  
28 Chapel Street, Luton Bedfordshire LU1 2SE, (GB)  
PATENT (CC, No, Kind, Date): EP 413432 A2 910220 (Basic)  
EP 413432 A3 910502  
EP 413432 B1 930428  
APPLICATION (CC, No, Date): EP 90307616 900711;  
PRIORITY (CC, No, Date): US 393189 890814  
DESIGNATED STATES: DE; FR; GB; IT  
INTERNATIONAL PATENT CLASS: F02D-041/10

ABSTRACT EP 413432 A2

An engine control system is disclosed for reducing the hydrocarbon content in exhaust gas from a crankcase-scavenged, two-stroke engine (10) in the operating range near idle, with light operator-induced engine loading. As operator demand for engine output power is increased, the control system increases the fuel per cylinder delivered to the engine (10), whilst restricting the supplied mass of air per cylinder to a value less than or equal to that flowing at unloaded engine idle, in said operating range. This is done by coupling a throttle pedal (56) to a throttle valve (52) in an air intake manifold (20) through a pivoted linkage system (60,62,64,66,68,70,72,74) which includes a lost-motion connection (72,74), which prevents movement of the throttle valve (52) until a predetermined displacement of the throttle pedal (56) has occurred. A computer (48) of the control system controls the fuel supply per cylinder in response to signals (PED) received from a potentiometer (84) monitoring all movement of the throttle pedal (56). The control system also may include an air bypass passage (76) and a computer-controlled, solenoid-actuated valve (78) to further control the supplied mass of air in said operating range.

ABSTRACT WORD COUNT: 195

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	434
CLAIMS B	(German)	EPBBF1	387
CLAIMS B	(French)	EPBBF1	517
SPEC B	(English)	EPBBF1	4457
Total word count - document A			0
Total word count - document B			5795
Total word count - documents A + B			5795

6/3,AB/15 (Item 15 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2001 European Patent Office. All rts. reserv.

00267518

Groundwater pollution abatement.

Grundwasserdekontaminierung.

Decontamination des eaux souterraines.

PATENT ASSIGNEE:

UNION OIL COMPANY OF CALIFORNIA, (434112), 1201 West 5th Street, Los Angeles California 90017, (US), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

Fenton, Donald M. , 2861 Alden Place, Anaheim California 92806, (US)  
Holm, LeRoy, W., 601 Elinor Drive, Fullerton California 92635, (US)  
Saunders, Dennis L., 741 Goldfinch Way, Anaheim California 92807, (US)

LEGAL REPRESENTATIVE:

Jack, Bruce James et al (32221), FORRESTER & BOEHMERT Widenmayerstrasse 4/I, D-8000 Munchen 22, (DE)

PATENT (CC, No, Kind, Date): EP 287727 A1 881026 (Basic)

APPLICATION (CC, No, Date): EP 87303627 870424;

PRIORITY (CC, No, Date): EP 87303627 870424

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: B09B-005/00; C02F-001/28;

ABSTRACT EP 287727 A1

A method for pollution abatement in groundwaters comprises drilling a series of wells in the path of an advancing front of contaminants in an aquifer, and using the wells to introduce into the aquifer an adsorbent for the particular contaminants present.  
ABSTRACT WORD COUNT: 45

LANGUAGE (Publication,Procedural,Application): English; English; English

6/3,AB/16 (Item 16 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2001 European Patent Office. All rts. reserv.

00058757

**METHOD FOR REMOVING HYDROGEN SULFIDE FROM GAS STREAMS.**  
**VERFAHREN ZUM ENTFERNEN VON HYDROGENSULFID AUS GASSTROMEN.**  
**PROCEDE D'ELIMINATION DE SULFURE D'HYDROGENE DE COURANT GAZEUX.**  
PATENT ASSIGNEE:

UNION OIL COMPANY OF CALIFORNIA, 376 So. Valencia Avenue P.O. Box 76,  
Brea, CA 92621, (US), (applicant designated states:  
AT;CH;DE;FR;GB;LI;LU;NL;SE)

INVENTOR:

**FENTON, Donald Mason** , 2861 Alden Place, Anaheim, CA 92806, (US)  
GOWDY, Hugh William, 19431 Sierra Santo Road, Irvine, CA 92715, (US)

LEGAL REPRESENTATIVE:

Madgwick, Paul Roland et al , Ladas & Parry Isartorplatz 5, D-8000  
Munchen 2, (DE)

PATENT (CC, No, Kind, Date): EP 61444 A1 821006 (Basic)  
EP 61444 B1 850522  
WO 8201364 820429

APPLICATION (CC, No, Date): EP 81900834 801014; WO 80US1374 801014

PRIORITY (CC, No, Date): EP 81900834 801014; WO 80US1374 801014

DESIGNATED STATES: AT; CH; DE; FR; GB; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C01B-017/05;

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

6/3,AB/17 (Item 17 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2001 European Patent Office. All rts. reserv.

00049132

**Lactase preparation.**  
**Herstellung von Laktase.**  
**Production de lactase.**  
PATENT ASSIGNEE:

PFIZER INC., 235 East 42nd Street, New York, N.Y. 10017, (US), (applicant  
designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

**Fenton, Dennis Michael** , 861 Long Cove Road Gales Ferry, New London  
Connecticut, (US)

LEGAL REPRESENTATIVE:

Moore, James William , Pfizer Limited Ramsgate Road, Sandwich Kent CT13  
9NJ, (GB)

PATENT (CC, No, Kind, Date): EP 36737 A2 810930 (Basic)  
EP 36737 A3 830511  
EP 36737 B1 860205

APPLICATION (CC, No, Date): EP 81301094 810316;

PRIORITY (CC, No, Date): US 133036 800324

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-009/38; C12N-009/00;

ABSTRACT EP 36737 A2

Lactase preparation.

A process for the release of lactase from yeast cells comprising  
contacting the cells with an alkyl alcohol or a dialkyl ketone, followed  
by extraction of the lactase in an aqueous solution at a pH in the range

5.5 to 8.0 is disclosed. Also disclosed is a process for the selective reduction of protease activity in lactase preparations comprising heating an aqueous solution of lactase containing protease impurities in the presence of glycerol. Lactase stability during the heating process can optionally be enhanced by addition of manganous ion.

ABSTRACT WORD COUNT: 92

LANGUAGE (Publication,Procedural,Application): English; English; English

6/3,AB/18 (Item 18 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2001 European Patent Office. All rts. reserv.

00012110

Destruction by fermentation of 2-ketogluconate in the presence of 2-ketogulonate.

Zerstörung von 2-Keto-Glukonat durch Gärung in Anwesenheit von 2-Keto-Gulonat.

Destruction de 2-ceto-gluconate par fermentation en presence de 2-ceto-gulonate.

PATENT ASSIGNEE:

PFIZER INC., 235 East 42ND Street, New York, N.Y. 10017, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LU;NL;SE)

INVENTOR:

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Gagne, John William, Pinebrook Village, Norwich, New London Connecticut, (US)

Fenton, Dennis Michael , 864 Long Cove Road, Gales Ferry, New London Connecticut, (US)

LEGAL REPRESENTATIVE:

Graham, Philip Colin Christison et al , Pfizer Limited Ramsgate Road, Sandwich, Kent CT13 9NJ, (GB)

PATENT (CC, No, Kind, Date): EP 7751 A1 800206 (Basic)

EP 7751 B1 820331

APPLICATION (CC, No, Date): EP 79301384 790713;

PRIORITY (CC, No, Date): US 926262 780720

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LU; NL; SE

INTERNATIONAL PATENT CLASS: C07H-007/02; C12P-007/60;

ABSTRACT EP 7751 A1

Destruction by fermentation of 2-ketogluconate in the presence of 2-ketogulonate.

2-Ketogluconate present in a mixture with 2-ketogulonate is destroyed by fermentation with a strain of Pseudomonas fluorescens leaving desired 2-ketogulonate intact. Subsequent hydrolysis of the 2-ketogulonate yields ascorbic acid. The preferred Pseudomonas strains are NRRL B10 and ATCC 13430.

ABSTRACT WORD COUNT: 51

LANGUAGE (Publication,Procedural,Application): English; English; English

6/3,AB/19 (Item 19 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
(c) 2001 WIPO/MicroPat. All rts. reserv.

00335380

METHOD TO TREAT GEOTHERMAL FLUID STREAMS

PROCEDE DE TRAITEMENT DES FLUX DE FLUIDE GEOTHERMIQUE

Patent Applicant/Assignee:

UNION OIL COMPANY OF CALIFORNIA

Inventor(s):

GALLUP Darrell L

OBANDO Manuel E

PEADEN Paul A

KELLY Brian J

KITZ Kevin R

FENTON Donald M  
SAUNDERS Dennis L

Patent and Priority Information (Country, Number, Date):

Patent: WO 9322032 A1 19931111

Application: WO 93US3339 19930409 (PCT/WO US9303339)

Priority Application: US 92875344 19920429

Designated States: AT AU BB BG BR CA CH CZ DE DK ES FI GB HU JP KP KR LK LU  
MG MN MW NL NO PT RO RU SD SE SK UA AT BE CH DE DK ES FR GB GR IE IT LU  
MC NL PT SE BF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 10380

#### English Abstract

An integrated system of non-condensable gas (NCG) and condensate treatment allows geothermal power plant condensate and non-condensable gas effluent streams containing H<sub>2</sub>S and ammonia to be commercially useful for more than for cooling tower makeup. In the preferred embodiment, the pH of the condensate is increased by adding ammonia and the pH increased stream is contacted with NCG to scrub and oxidize the H<sub>2</sub>S constituent of the NCG. By reducing the pH, the condensate or aqueous stream mixture can also be used to further transfer ammonia from the non-condensable gas stream to the aqueous stream, enriching the stream for use as a fertilizer/irrigation water mixture. If other commercial uses are desired for the mixture and/or oxidized NCG streams, they can be resin treated to remove the ammonia constituent. With the ammonia and H<sub>2</sub>S constituents decreased, the condensate may be used for a variety of **applications** and the NCG can be injected or used as a commercial feed stream. Rejuvenation of the resin may be accomplished by recycling and purging with the treated NCG. The effluent purge gas may be used to further enrich irrigation waters. A nearly total elimination of all emissions from the geothermal power is thereby made possible.

#### French Abstract

L'invention concerne un systeme integre de traitement des gaz non condensables et des condensats qui permet d'utiliser commercialement les flux de gaz non condensables et les condensats contenant du H<sub>2</sub>S et de l'ammoniac provenant de centrales geothermiques, a d'autres fins que pour l'alimentation d'appoint de tours de refroidissement. Dans un mode prefere de realisation, on augmente le pH du condensat en ajoutant de l'ammoniac, et on met ledit flux a pH ainsi augmente en contact avec le gaz non condensable afin de neutraliser et oxyder le H<sub>2</sub>S du gaz non condensable. Lorsque l'on reduit le pH, le condensat ou le flux aqueux peut egalement etre utilise pour transferer encore l'ammoniac du flux de gaz non condensable au flux aqueux, ce qui permet d'enrichir ce dernier et de l'utiliser en tant que melange aqueux fertilisant/d'irrigation. Pour d'autres **applications** commerciales, le melange et/ou les flux de gaz non condensables oxydes peuvent etre traites avec de la resine afin que l'ammoniac en soit extrait. Une fois sa teneur en ammoniac et H<sub>2</sub>S reduite, le condensat peut etre utilise dans de nombreuses **applications**, et le gaz non condensable peut etre injecte ou utilise en tant que flux d'alimentation du commerce. La regeneration de la resine peut s'effectuer par recyclage et purge au moyen du gaz non condensable traite. Le gaz de purge effluent peut etre utilise pour enrichir les eaux d'irrigation. Ainsi, il devient possible d'eliminer presque totalement toutes les emissions resultant de l'energie geothermique.

9/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010744328

WPI Acc No: 1996-241283/199625

XRAM Acc No: C96-077085

**New morphine and codeine 6-ether or ester derivs. - are useful as opioid analgesics with reduced affinity for Kappa receptors and good bio-availability**

Patent Assignee: BRITISH TECHNOLOGY GROUP LTD (BRTE-N)

Inventor: MARPLES B A; TRAYNOR J R

Number of Countries: 022 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2295390	A	19960529	GB 9523722	A	19951120	199625 B
WO 9616063	A1	19960530	WO 95GB2712	A	19951120	199627
AU 9538771	A	19960617	AU 9538771	A	19951120	199638
GB 2295390	B	19970618	GB 9523722	A	19951120	199727
ZA 9509921	A	19970730	ZA 959921	A	19951122	199735
EP 793664	A1	19970910	EP 95937952	A	19951120	199741
			WO 95GB2712	A	19951120	
JP 10509167	W	19980908	WO 95GB2712	A	19951120	199846
			JP 96516670	A	19951120	

Priority Applications (No Type Date): GB 9423542 A 19941122

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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GB 2295390	A		50	C07D-489/02	
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WO 9616063	A1 E		52	C07D-489/02	
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Designated States (National): AU CA JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AU 9538771	A			C07D-489/02	Based on patent WO 9616063
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ZA 9509921	A		50	C07D-000/00	
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EP 793664	A1 E			C07D-489/02	Based on patent WO 9616063
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Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

JP 10509167	W		57	C07D-489/02	Based on patent WO 9616063
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GB 2295390	B			C07D-489/02	
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Abstract (Basic): GB 2295390 A

Use of morphine and codeine derivs. of formula (I) or their salts in therapy is claimed. In (I), R1 is H or Me; R2 is H, 1-4C alkyl, allyl or cyclopropylmethyl; R3 is OCOR4, OCH2R4 or OCOCH=CHR4; R4 is a gp. of formula (i); X1-X5 are H, 1-4 C alkyl or alkoxy, NH2 (opt. substd. by 1-4 C alkyl), NO2, OH, halo, morpholine or COR5; or any adjacent pair of X gps. one together alkylene opt. interrupted by O, S or N, of up to 5 atoms long; R5 is H, OH or 1-4 C alkoxy.

Also new are cpds. (I) except where all of X1-X5 are H.

USE - (I) are opioid analgesics. Dosage is 1-100 (pref. 5-50) mg orally or by intramuscular or subcutaneous injections, or in sustained release form.

ADVANTAGE - Compared with morphine-6-glucuronide, (I) have equal affinity for mu-receptors, higher affinity for delta-receptors and lower affinity for Kappa-receptors (responsible for psychomimetic effects) and better bioavailability.

Dwg.0/2

Abstract (Equivalent): GB 2295390 B

A compound of Formula I wherein R1 = H (morphine analogue), CH3 (codeine analogue) R2 = H, alkyl group of 1 to 4 carbon atoms, allyl, cyclopropylmethyl -O-CH2-R4 (ether) -O-COCH=CHR4 (cinnamate) wherein X1, X2, X3, X4 and X5 which may be the same or different are separately selected from H, alkyl of 1 to 4 carbon atoms, NH2, NO2 alkoxy group of 1 to 4 carbon atoms, hydroxy, halogen, N-alkyl, group of 1 to 4 carbon atoms, morpholine, or a group COR5 wherein R5 is H, OH, O-alkyl where alkyl is from 1 to 4 carbon atoms, or one of X1 and X2, X2 and X3, X3 and X4 or X4 and X5 together with an alkylene group optionally interrupted by O, S or N of up to 5 atoms in length complete a ring and



a pharmaceutically acceptable salt thereof for use in therapy.  
Dwg.0/0

9/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010120248

WPI Acc No: 1995-021499/199503

XRPX Acc No: N95-016784

**Improved article storage caddy - includes fabric panel having  
multipocketed face portion and folded portion, with textile fastening  
strip releasably securing face portion to folded portion**

Patent Assignee: TRAYNOR J G (TRAY-I)

Inventor: TRAYNOR J G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5370246	A	19941206	US 92926499	A	19920805	199503 B

Priority Applications (No Type Date): US 92926499 A 19920805

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5370246	A	11	A47F-005/08	

Abstract (Basic): US 5370246 A

The caddy comprises a continuous non-woven fabric panel having a front and a back, a top edge, a bottom edge and side edges, and face and folded portions. There are at least two pockets having pleated sides attached to the front of the face portion and a pair of elastic loops, spaced apart and in alignment with each other, attached to the front of the face portion in a position adjacent to the pockets.

There is a textile fastening strip attached along the top edge of the folded portion and extending beyond one side edge to form a strap, wherein the strap is releasably secured to the face portion of the non-woven fabric panel.

ADVANTAGE - Provides a patient caddy which can be installed in a variety of locations to suit a patient's needs. The caddy can be installed at any position along a rail of a patient support device.

Dwg.1/14

13/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

013121002

WPI Acc No: 2000-292873/200025

XRPX Acc No: N00-219627

**Multiplexed microcalorimeter for trace element determination in biological specimens has single preamplifier circuit whose output is proportional to radiation absorbed by detectors in each microcalorimeter**

Patent Assignee: SMITHSONIAN ASTROPHYSICAL OBSERVATORY (SMIT-N)

Inventor: MADDEN N W; **SILVER E H**

Number of Countries: 086 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200017614	A2	20000330	WO 99US22282	A	19990924	200025 B
AU 9962658	A	20000410	AU 9962658	A	19990924	200035

Priority Applications (No Type Date): US 98101640 A 19980924

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200017614	A2	E	10	G01K-000/00	
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Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN  
CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ  
LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 9962658	A			G01K-000/00	Based on patent WO 200017614
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Abstract (Basic): WO 200017614 A2

Abstract (Basic):

NOVELTY - Microcalorimeters (10, 12, 14, 16) include detectors coupled thermally to a cold bath. Each detector has thermal sensor to generate a signal proportional to rise in detector temperature. The signals from the thermistors are input to gate of JFET (18) in negative voltage feedback preamplifier (20) whose output is proportional to radiation energy absorbed by the detectors.

USE - The microcalorimeters are used for trace element determination in biological specimen, geological and environmental waste samples.

ADVANTAGE - Multiplexing arrangement of the microcalorimeters reduces overall number of preamplifier and post-processing channels for layer multi-element array. The reduction in number of preamplifiers, lowers JFET heat load, mass and power requirements for microcalorimeter array, significantly.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic circuit diagram of multiplexing system.

Microcalorimeters (10, 12, 14, 16)

JFET (18)

Negative voltage feedback preamplifier (20)

pp; 10 DwgNo 1/2

13/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

012999434

WPI Acc No: 2000-171286/200015

XRAM Acc No: C00-053350

XRPX Acc No: N00-127260

**Temperature sensor for use in cryogenic temperature operations**

Patent Assignee: SMITHSONIAN ASTROPHYSICAL OBSERVATORY (SMIT-N)

Inventor: LAWRENCE L H; MADDEN N W; ROBINSON M; **SILVER E H**

Number of Countries: 083 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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WO 200004357 A1 20000127 WO 99US16238 A 19990715 200015 B  
AU 9951108 A 20000207 AU 9951108 A 19990715 200029

Priority Applications (No Type Date): US 99353548 A 19990714; US 9892878 A 19980715

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200004357 A1 E 15 G01K-007/22

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU  
CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL  
TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9951108 A G01K-007/22 Based on patent WO 200004357

Abstract (Basic): WO 200004357 A1

Abstract (Basic):

NOVELTY - The temperature sensor comprises a substrate (4) and an epitaxial germanium layer (1). The layer includes a dopant (2) having a concentration selected to allow the layer to be resistive in a selected temperature range. The resistance is determined by hopping conduction of free carriers.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the production of an epitaxial germanium temperature sensor, comprising depositing an epitaxial germanium layer (1) onto a substrate (4) by chemical vapor deposition (CVD) process and doping the layer during the vapor phase of the CVD process.

USE - The temperature sensor is used in cryogenic temperature operations, e.g. in analytical science for low temperature thermometry and control in laboratory and industrial settings, to applications associated with infrared, X-ray, particle and plasma physics and spectroscopy.

ADVANTAGE - A highly sensitive temperature sensor can be manufactured reproducibly, uniformly, and in large quantities at relatively low cost.

DESCRIPTION OF DRAWING(S) - The figure shows a cross-sectional view of an epitaxial germanium temperature sensor.

Epitaxial germanium layer (1)

Dopant (2)

Buffer layer (3)

Substrate (4)

pp; 15 DwgNo 1/2

13/3,AB/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012827655

WPI Acc No: 1999-633887/199954

XRAM Acc No: C99-185144

XRPX Acc No: N99-468067

**X-ray beam concentrator of X-ray diagnostic system for astrophysical and X-ray micro analysis applications**

Patent Assignee: SMITHSONIAN ASTROPHYSICAL OBSERVATORY (SMIT-N)

Inventor: INGRAM R; SCHNOPPER H W; **SILVER E H**

Number of Countries: 035 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9953823	A2	19991028	WO 99US8394	A	19990416	199954 B
AU 9935667	A	19991108	AU 9935667	A	19990416	200014
US 6094471	A	20000725	US 9864476	A	19980422	200038

Priority Applications (No Type Date): US 9864476 A 19980422

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9953823 A2 E 23 A61B-000/00

Designated States (National): AT AU BR BY CA CH CZ HU JP KP KR MX NO NZ  
PL RU SE SG UA

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE

AU 9935667 A A61B-000/00 Based on patent WO 9953823  
US 6094471 A G21K-001/06

Abstract (Basic): WO 9953823 A2

Abstract (Basic):

NOVELTY - A point-to-point X-ray concentrator (14) focuses the X-rays generated by electron microscope (10), to spectrometer (16). The X-ray is generated by an irradiating ion beam, synchrotron beam or laser to confined plasma. The concentrator consists of cylindrical or conical spiral foils with reflecting surfaces.

USE - For astrophysical and X-ray micro analysis applications and such as radiography, x-ray lithography, radiation therapy.

ADVANTAGE - The spectral resolution is high because the concentration is used for focusing purpose. The uncertainty of diagnosis is removed.

DESCRIPTION OF DRAWING(S) - The figure shows schematic a drawing of X-ray diagnostic system.

Electron microscope (10)

X-ray concentrator (14)

Spectrometer (16)

pp; 23 DwgNo 1/22

13/3,AB/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011981301

WPI Acc No: 1998-398211/199834

XRAM Acc No: C98-120592

XRPX Acc No: N98-309770

**Broadband, high resolution X-ray spectral analyser - including at least one microcalorimeter in a cryogenic refrigeration system, with an X-ray absorber, and a thermistor with superconducting wire**

Patent Assignee: UNIV CALIFORNIA (REGC )

Inventor: GOULDING F; LANDIS D; LEGROS M; MADDEN N W; SILVER E H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5777336	A	19980707	US 95538323	A	19951003	199834 B

Priority Applications (No Type Date): US 95538323 A 19951003

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5777336	A	7	G01T-001/36	

Abstract (Basic): US 5777336 A

A broadband, high resolution X-ray spectral analyser comprises a refrigeration system housing at least one microcalorimeter comprising an X-ray absorber (30), a neutron transmutation-doped germanium thermistor (32) with two electrical circuit nodes electrically connected to electrical contacts comprising boron ion implants (34) and a layer of aluminium (Al), and superconducting wire (36) bonded to each electrical contact. Also claimed is an analyser within a refrigeration system.

USE - The detectors are incorporated into compact and portable cryogenic refrigerator systems that are ready for use in many analytical spectroscopic applications as a tool for X-ray microanalysis or in research applications such as laboratory and astrophysical X-ray and particle spectroscopy.

ADVANTAGE - Provides high-resolution X-ray spectra without the sensitivity and bandwidth limitations of a crystal spectrometer.

Dwg.3/6

13/3,AB/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

010523213

WPI Acc No: 1996-020166/199602

XRPX Acc No: N96-016846

**Monitoring and controlling communication directed to called party - determines location of called party from changeable list such that communication may be accepted, rejected or monitored by called person at that location**

Patent Assignee: BELLSOUTH CORP (BELL-N)

Inventor: ADDISON C; BAILEY K; HILL P; HOWE W; MALIK D; MOREL K; SHIH J;

**SILVER E ; WOODRING L**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5471519	A	19951128	US 9325370	A	19930226	199602 B

Priority Applications (No Type Date): US 9325370 A 19930226

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5471519	A		19	H04M-003/22	

Abstract (Basic): US 5471519 A

The method for processing a communication directed to a called party involves receiving the communication and advising the called party of it. Disposition information regarding the communication comprising a request for monitoring the communication is received.

In response to receiving the request for monitoring, the communication is routed to a message service and a one-way connection is established from the communication to the called party, whereby the communication routed to the message service may be monitored by the called party through the one-way connection.

USE/ADVANTAGE - Does not require purchase of special equipment or communication services. Can be used at all extensions or allocated to specified lines. Can be used at any location designated by user.

Dwg.1/3

13/3,AB/6 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

009406525

WPI Acc No: 1993-100035/199312

XRPX Acc No: N93-076145

**Fascia board holder for roof rafter - has channel section with pivotally mounted quadrant and second open channel mounted on quadrant to receive board**

Patent Assignee: SILVER E (SILV-I)

Inventor: **SILVER E**

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5192059	A	19930309	US 92873780	A	19920427	199312 B
CA 2094537	A	19931028	CA 2094537	A	19930421	199404

Priority Applications (No Type Date): US 92873780 A 19920427

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5192059	A		4	B25B-005/14	
CA 2094537	A			E04F-021/00	

Abstract (Basic): US 5192059 A

The fascia board holder comprises a first channel section adapted to receive a roof rafter, appts. to releasably secure the channel

section to the rafter, a planar quadrant element pivotally mounted on the channel section for rotation about a horizontal axis when the channel section is operatively mounted on the roof rafter, appts. to releasably secure the planar-element in a selected angular position relative to the channel section, and a second channel section rigidly mounted on planar element in a plane perpendicular thereto, to slidably receive and retain a fascia board in perpendicular abutting relation to the rafter.

ADVANTAGE - Allows for varying roof pitch.

Dwg.1/2

13/3,AB/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009287254

WPI Acc No: 1992-414665/199250

XRPX Acc No: N92-316228

**Computer disc storage and travel case - with protective lead lining secured within pocket by lift-up flap**

Patent Assignee: DOUBLECHECK INC (DOUB-N)

Inventor: GUSENOFF S I; SILVER E ; SLAWSBY E A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5165544	A	19921124	US 91742854	A	19910808	199250 B

Priority Applications (No Type Date): US 91742854 A 19910808

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5165544	A	6	B65D-085/57	

Abstract (Basic): US 5165544 A

The computer disc storage and travel case includes a removable protective lining, such a lead lining, a back flap attached to a front flap to form a protective lining pocket and at least one disc pocket formed by a disc flap attached to the front flap. The protective lining limits X-ray and magnetic radiation from damaging the disc or information stored there. The protective lining may be removed from the case for inspection by airport security personnel or other investigators without destroying the case.

The storage and travel case can be folded in any of various configurations to provide additional protection to the enclosed computer discs. The case may be folded in thirds so that a portion of the front flap covers a portion of the back flap. For securing the case in its folded configuration a hook-and-wool fastener may also be included.

USE - To avoid damage to computer discs when exposed to magnetic radiation e.g. airport X-ray machines.

Dwg.2/5

13/3,AB/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003111708

WPI Acc No: 1981-M1757D/198147

**Rocking toy for child - has corrugated paperboard folded to form three-dimensional modules which are assembled to form toy**

Patent Assignee: SILVER E J (SILV-I)

Inventor: SILVER E J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4298196	A	19811103				198147 B

Priority Applications (No Type Date): US 7937865 A 19790510

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
US 4298196	A		8		

Abstract (Basic): US 4298196 A

The rocking toy, capable of being ridden and rocked, is assembled from a number of three-dimensional modules. Each of the modules is pref. formed from a pre-cut and pre-scored unitary piece of rigid sheet material, such as corrugated paperboard, which may be folded to form the three-dimensional module.

The modules are interconnected in such manner as to form a rigid and sturdy rocking toy rockable on a rocking surface formed by the modules.

1

13/3,AB/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2001 Derwent Info Ltd. All rts. reserv.

002314063

WPI Acc No: 1980-C0498C/198009

**Unitary hanger display package for socks etc. - includes hook and label on opposite side of socks held together by thermoplastics filament**

Patent Assignee: SILVER KNIT INDS IN (SIJU )

Inventor: **SILVER E S**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4189049	A	19800219				198009 B

Priority Applications (No Type Date): US 78940459 A 19780907

Abstract (Basic): US 4189049 A

The unitary hanger display package for an article of textile manufacture such as a pair of socks to be displayed, includes a unitary freely moveable hook for suspending the article in a vertical position positioned on one side of said article.

A flat unfolded identification lable having indicia thereon, is positioned on the opposite side of the articles. A thermoplastics filament penetrates the suspending hook, the article and the label and retaining them together as a unit to form an integral package.

13/3,AB/10 (Item 10 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01131177

**EPITAXIAL GERMANIUM TEMPERATURE SENSOR**

**TEMPERATURFUHLER AUS EPITAKTISCHEN GERMANIUM**

**CAPTEUR THERMIQUE COMPRENANT UNE COUCHE EPITAXIALE DE GERMANIUM**

PATENT ASSIGNEE:

Smithsonian Astrophysical Observatory, (2257170), 60 Garden Street,  
Cambridge, MA 02138, (US), (Applicant designated States: all)

INVENTOR:

**SILVER, Eric, H.**, 59 Maple Street, Needham, MA 02192, (US)

**MADDEN, Norman, W.**, 1293 Murdell Lane, Livermore, CA 94550, (US)

**ROBINSON, McDonald,** 5880 Hidden Lane, Goleta, CA 93117, (US)

**LAWRENCE, Lamonte, H.**, 100 Sir Frances Drake Boulevard, Ross, CA 94957,  
(US)

PATENT (CC, No, Kind, Date):

WO 0004357 000127

APPLICATION (CC, No, Date): WO 99935681 990715; WO 99US16238 990715

PRIORITY (CC, No, Date): US 92878 P 980715

DESIGNATED STATES: AT

INTERNATIONAL PATENT CLASS: G01K-007/22

LANGUAGE (Publication,Procedural,Application): English; English; English



16/3,AB/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2001 Derwent Info Ltd. All rts. reserv.

008929606

WPI Acc No: 1992-056875/199207

XRAM Acc No: C92-025714

**Fermentative prodn. of riboflavin using Candida strain - gives high productivity using restricted nutrient uptake, specified, sterilised nitrogen source, and controlled copper concn.**

Patent Assignee: COORS BIOTECH INC (COOA ); ARCHER DANIELS MIDLAND CO (ARCH-N); ZEAGEN INC (ZEAG-N); ZGI II INC (ZGIO-N)

Inventor: BAILEY R B; BOYTS A; BURDZINSKI L A; HEEFNER D L; LAUDERDALE G W; **WEAVER C A** ; YARUS M J

Number of Countries: 035 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9201060	A	19920123				199207 B
AU 9183093	A	19920204	AU 9183093	A	19910712	199220
			WO 91US4941	A	19910712	
EP 539507	A1	19930505	EP 91914110	A	19910712	199318
			WO 91US4941	A	19910712	
EP 539507	A4	19940427	EP 91914110	A	19910000	199530

Priority Applications (No Type Date): US 90552169 A 19900713

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9201060	A				
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Designated States (National): AT AU BB BG BR CA CS DE DK ES FI GB HU JP  
KP KR LK LU MC MG MW NL NO PL RO SD SU

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL OA SE

AU 9183093	A			C12P-025/00	Based on patent WO 9201060
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EP 539507	A1 E	40		C12P-025/00	Based on patent WO 9201060
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Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Abstract (Basic): WO 9201060 A

Fermentative prodn. of riboflavin (I) comprises; (A) restricting the uptake rate of a nutrient that does not limit growth, and using an N source selected from NH<sub>4</sub> salts, NH<sub>4</sub>OH and NH<sub>3</sub>; or (B) the Cu concn. in the fermentation medium is 6.6-30 mcg/l (calculated as CuSO<sub>4</sub>.5H<sub>2</sub>O); or (C) the N source is heat-sterilised and the pH of the fermentation medium is controlled only by addn. of a base.

Also claimed are (I)-producing microorganism strains that have been selected for decreased sensitivity to Cu toxicity.

The restricted nutrient is pref. glucose. The microorganism is pref. a Candida famata strain, esp. ATCC 20849. The glucose feed rate is 0.5-5 g/l.hr. The Fe concn. is 0.25-6 ppm. The dilution rate is 0.009-0.011/hr.

ADVANTAGE - Riboflavin productivities of at least 0.17 g/l. hr may be achieved.

Dwg.0/0

16/3,AB/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008305918

WPI Acc No: 1990-192919/199025

XRAM Acc No: C90-083461

XRPX Acc No: N90-150139

**Nickel-phosphorus undercoat for particulate magnetic media - provides lower cost storage device with smooth surface allowing small head-to-disc clearances**

Patent Assignee: MAGNETIC PERIPHERALS INC (MPER )

Inventor: SHADZI B; **WEAVER C A**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4929499	A	19900529	US 89380758	A	19890717	199025 B

Priority Applications (No Type Date): US 88183863 A 19880420; US 89380758 A 19890717

Abstract (Basic): US 4929499 A

An appts. comprises: (a) a substrate; (b) a first layer electrolessly plated thereon and contg. nickel and phosphorus; (c) a second layer of a particulate magnetic medium, spin-coated thereon and comprising magnetic particles suspended in a binder.

USE/ADVANTAGE - Used in high density magnetic storage media, e.g. magnetic discs. The novel undercoat provides a smoother surface than in known particulate media, thus allowing read/write heads to pass closer to the disc. On the other hand, it is cheaper than other smooth thin film coating which require deposition by sputtering.

Dwg.1/8

16/3,AB/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007734704

WPI Acc No: 1988-368636/198851

Related WPI Acc No: 1987-222707

XRAM Acc No: C88-163187

**New Candida famata strains - produce high yields of riboflavin**

Patent Assignee: ZGI II INC (ZGII-N); ARCHER-DANIELS MIDLAND CO (ARCH );

ZEAGEN INC (ZEAG-N); ARCHER DANIELS MIDLAND CO (ARCH-N); COORS BIOTECH

INC (COOA ); COORS BIOTECH PROD (COOA ); COORS BIOTECH PROD CO (COOA )

Inventor: BURDZINSKI L A; FOSTER E W; GYURE D C; HEEFNER D L; **WEAVER C A** ;

YARUS M J

Number of Countries: 021 Number of Patents: 018

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8809822	A	19881215	WO 88US1876	A	19880602	198851 B
AU 8819474	A	19890104				198919
ES 2009931	A	19891016	ES 881749	A	19880603	199003
NO 8904818	A	19900115				199008
FI 8905762	A	19891201				199010
EP 365560	A	19900502	EP 88905537	A	19880602	199018
DK 8906067	A	19900130				199027
US 5120655	A	19920609	US 85811234	A	19851220	199226
			US 8757948	A	19870605	
CA 1316857	C	19930427	CA 567622	A	19880525	199322
JP 5509221	W	19931222	JP 88505192	A	19880602	199405
			WO 88US1876	A	19880602	
EP 365560	B1	19941109	EP 88905537	A	19880602	199443
			WO 88US1876	A	19880602	
NO 176327	B	19941205	WO 88US1876	A	19880602	199503
			NO 894818	A	19891201	
DE 3852103	G	19941215	DE 3852103	A	19880602	199504
			EP 88905537	A	19880602	
			WO 88US1876	A	19880602	
EP 365560	A4	19910626	EP 88905537	A		199517
DK 170235	B	19950710	WO 88US1876	A	19880602	199533
			DK 896067	A	19891201	
FI 97067	B	19960628	WO 88US1876	A	19880602	199632
			FI 895762	A	19891201	
KR 9709160	B1	19970607	WO 88US1876	A	19880602	199944
			KR 89700208	A	19890204	
JP 3061809	B2	20000710	JP 88505192	A	19880602	200037
			WO 88US1876	A	19880602	

Priority Applications (No Type Date): US 8757948 A 19870604; US 85811234 A 19851220

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 8809822	A	E	55		
Designated States (National): AU BR DK FI JP KR NO					
Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE					
EP 365560	A			C12P-025/00	
Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE					
US 5120655	A		11	C12N-001/16	CIP of application US 85811234
CA 1316857	C			C12N-015/00	
JP 5509221	W		15	C12N-001/20	Based on patent WO 8809822
EP 365560	B1	E	23	C12P-025/00	Based on patent WO 8809822
Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE					
NO 176327	B			C12N-001/16	Previous Publ. patent NO 8904818
DE 3852103	G			C12P-025/00	Based on patent EP 365560
Based on patent WO 8809822					
DK 170235	B			C12N-001/16	Previous Publ. patent DK 8906067
FI 97067	B			C12N-001/16	Previous Publ. patent FI 8905762
KR 9709160	B1			C12P-025/00	
JP 3061809	B2		18	C12N-001/20	Previous Publ. patent JP 5509221
Based on patent WO 8809822					

Abstract (Basic): WO 8809822 A

(A) *Candida famata* strains capable of producing at least 10 g. of riboflavin (I) per litre of fermentation medium in 6 days are new.

(B) Selection of a microorganism resistant to inhibition by depleted media is effected by (a) growing a microorganism in an aq. nutrient medium until cell growth stops, (b) removing the microorganism to obtain a depleted medium, (c) forming a selection medium contg. the depleted medium in a minimum inhibitory concn. for a population of unmutated microorganisms, (d) mutating a population of the microorganisms, (e) introducing the mutated population into the selection medium, and (f) selecting a strain capable of growing on the selection medium.

(C) Selection of (I)-producing microorganisms is effected by (i) selecting a strain resistant to inhibition by depleted medium as above, (ii) mutating this strain, (iii) culturing the mutants on a nutrient medium contg. tubercidin at a minimum inhibitory concn. for the unmutated strain, and (iv) selecting a strain capable of forming colonies on the tubercidin-contg. medium.

ADVANTAGE - Yields of more than 20 g/l. (I) in 200 hr. have been achieved.

Dwg.0/0

Abstract (Equivalent): EP 365560 B

A strain of *Candida famata* capable of producing at least about 10 grams of riboflavin per litre of fermentation medium in six days.

Dwg.0/0

Abstract (Equivalent): US 5164303 A

Prod'n. of riboflavin comprises propagation of *Candida famata* (ATCC 10849 and 20850 and/or their mutants), in a nutrient medium contg. Fe(II) ions (about 7.7-15 micro-mol. dm<sup>-3</sup>) and the usual C and N sources, trace elements and growth factors, maintaining nutrient concentrations for six days; then recovery and purification of the riboflavin.

USE - The yields are high (at least 10g riboflavin per dm<sup>3</sup> nutrient medium in six days), and the prod. is a valuable nutrient and pharmaceutical agent.

Dwg.0/0

US 5120655 A

*Candida albicans* strains ATCC 20849 and 20850 and their mutants are claimed, which produce at least 10g riboflavin/l fermentation medium in 6 days.

USE/ADVANTAGE - The strains produce much more riboflavin than wild type or developed strains, and are used to select riboflavin overproducers. They may produce 10g riboflavin/l in 6 days, and can grow to higher cell densities to produce more metabolic products.

Dwg.0/0

007225699

WPI Acc No: 1987-222707/198732

Related WPI Acc No: 1988-368636

XRAM Acc No: C87-093638

**Producing riboflavin by culturing Candida flareri strains - mutagenised and screened in flavinogenesis-stimulating medium for resistance to purine biosynthesis inhibitors or deregulation**

Patent Assignee: COORS CO ADOLPH (COOA ); ZEAGEN INC (ZEAG-N)

Inventor: BOYTS A; BURDZINSKI L; HEEFNER D L; YARUS M; BURDZINSKI L A;

WEAVER C A ; YARUS M J

Number of Countries: 017 Number of Patents: 012

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 231605	A	19870812	EP 86309249	A	19861127	198732 B
JP 62228297	A	19871007	JP 86301836	A	19861219	198746
CN 8608637	A	19870805				198839
JP 2016968	A	19900119	JP 89127989	A	19870826	199009
CA 1305679	C	19920728	CA 525911	A	19861219	199236
JP 92064673	B	19921015	JP 86301836	A	19861219	199246
			JP 89127989	A	19861219	
US 5164303	A	19921117	US 85811234	A	19851220	199249
			US 8757948	A	19870605	
			US 90480267	A	19900215	
EP 231605	B1	19930407	EP 86309249	A	19861127	199314
DE 3688245	G	19930513	DE 3688245	A	19861127	199320
			EP 86309249	A	19861127	
US 5231007	A	19930727	US 85811234	A	19851220	199331
			US 88251943	A	19880929	
			US 91746208	A	19910815	
ES 2054619	T3	19940816	EP 86309249	A	19861127	199434
JP 2622253	B2	19970618	JP 86301836	A	19861219	199729

Priority Applications (No Type Date): US 85811234 A 19851220; US 8757948 A 19870605; US 90480267 A 19900215; US 88251943 A 19880929; US 91746208 A 19910815

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 231605	A	E	6		
	Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE				
JP 92064673	B		7	C12N-001/16	Div ex application JP 86301836 Based on patent JP 2016968
US 5164303	A		12	C12P-005/00	Cont of application US 85811234 Cont of application US 8757948 Cont of patent US 5120655
EP 231605	B1	E	8	C12P-025/00	
	Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE				
DE 3688245	G			C12P-025/00	Based on patent EP 231605
US 5231007	A		5	C12N-001/16	Cont of application US 85811234 Cont of application US 88251943
ES 2054619	T3			C12P-025/00	Based on patent EP 231605
JP 2622253	B2		6	C12P-025/00	Previous Publ. patent JP 62228297
CA 1305679	C			C12P-025/00	

Abstract (Basic): EP 231605 A

Prodn. of riboflavin comprises growing a candida flaeri nutagenised strain in a flavinogenesis-stimulating medium such that riboflavin is produced in enhanced amts. The strain is obt'd. as a result of physical or chemical mutagensis and protoplast fusion, where, after each mutagensos or fusion, strains are screamed in a flavinogenesis stimulating medium for resistance to a inhibitor of the purine biosynthesis pathway or deregulation of the pathway and at least 20% enhancement of riboflavin prodn. over the parent strain.

A riboflavin producing strain of C. flareri is new and is resistant to inhibition of B2 synthesis by AMP, resistant to inhibition of growth by 4-aminopyrazolo-(3,4-d) pyrimidine and resistant to catabolite repression in the presence of deoxyglucose when sucrose is

the carbon source. Specifically claimed strains are flareri GA 18Y8-6/2 dgr (ATCC 20756) and GA18Y8-6/211 (ATCC 20755).

ADVANTAGE - High levels of riboflavin (e.g. 5g/l after 6 days) can be produced with efficient utilisation of nutrients and improved resistant to iron repression of flavinogenesis.

Abstract (Equivalent): EP 231605 B

A method for the production of riboflavin, which comprises growing a Candida flareri mutagenised strain in a flavinogenesis-stimulating medium, whereby riboflavin is produced in enhanced amounts, wherein said C. flareri mutagenised strain is as a result of a regimen of mutagenesis by physical or chemical means and protoplast fusion, wherein after easy mutagenesis or fusion, strains are screened in a flavinogenesis-stimulating medium for resistance to an inhibitor of the purine biosynthesis pathway or deregulation of the purine biosynthesis pathway and wherein said strains and mutants thereof produce at least about 5 grams of riboflavin per litre of fermentation medium in six days. (Dwg.0/0)

Abstract (Equivalent): US 5164303 A

Prodn. of riboflavin comprises propagation of Candida famata (ATCC 10849 and 20850 and/or their mutants), in a nutrient medium contg. Fe(II) ions (about 7.7-15 micro-mol. dm<sup>-3</sup>) and the usual C and N sources, trace elements and growth factors, maintaining nutrient concentrations for six days; then recovery and purification of the riboflavin.

USE - The yields are high (at least 10g riboflavin per dm<sup>3</sup> nutrient medium in six days), and the prod. is a valuable nutrient and pharmaceutical agent. (Dwg.0/0)n

16/3,AB/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004775058

WPI Acc No: 1986-278399/198642

XRAM Acc No: C86-120374

XRPX Acc No: N86-207971

**Component retaining plate for wave soldering machine - with locating cavities with bevel section slots to prevent unwanted solder contamination of selected parts**

Patent Assignee: RCA CORP (RADC )

Inventor: **WEAVER C A**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4614294	A	19860930	US 85792473	A	19851029	198642 B

Priority Applications (No Type Date): US 85792473 A 19851029

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4614294	A	7		

Abstract (Basic): US 4614294 A

Components to be solder tinned in a wave soldering machine are retained during tinning in a holder with a base plate having cavities and elongate slots through which the component leads to be tinned depend. The slots have bevelled surfaces of a non wettable material, pref. titanium. Appts. comprises a wave tinning machine, having a component holder with slotted retaining recesses.

USE/ADVANTAGE - The appts. is useful for solder tinning the leads of electronic components using a wave soldering machine, and particularly for tinning extended leads of I.C. components. The holding device retains the component in the correct position during tinning, whilst the non-wettable angled surfaces of the slob, permit tinning of the leads whilst preventing solder contact with the I.C. body. (7pp)

16/3,AB/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX  
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004278047

WPI Acc No: 1985-104925/198517

XRAM Acc No: C85-045544

XRPX Acc No: N85-078601

**Processing extruder with constant output - has kneading screw motor  
current monitoring system controlling speeds of ancillary screws**

Patent Assignee: RCA CORP (RADC )

Inventor: STEPHENS J W; **WEAVER C A**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4510104	A	19850409	US 83539933	A	19831007	198517 B

Priority Applications (No Type Date): US 83539933 A 19831007

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4510104	A		10		

Abstract (Basic): US 4510104 A

Output of extruder for thermoplastic is automatically controlled. Extruder has inlet feed screw (28) for feeding dry particulate material to the inlet end (24) of a kneader screw (14) and an outlet feed screw (40) for removing molten processed material from the outlet end of the kneader screw, all the screws being operated by separate electric motors (30,18,36). The current used by the kneader screw is continuously monitored and the speed of the inlet screw and/or outlet screw varied accordingly to return and thus maintain the current used by the kneader screw motor at a constant level.

More specifically, if the kneader screw motor current increases, the speed of the inlet feed screw is decreased and/or the speed of the outlet feed screw is increased. If the current decreases, the opposite occurs. Pref. the speeds of the screws are set to provide a desired output and the current of the kneader screw motor monitored to maintain that output.

USE/ADVANTAGE - Extrusion appts. is of the type used to blend dry particulate ingredients by melting them and homogenising them using a rotating and axially reciprocating kneader screw following which the material is extruded and pelletised. Appts. ensures that the melt pool at the end of the kneading zone is maintained at a constant depth so that improperly blended material cannot be fed to the output screw to disrupt the proper pelletising of the material.

1/4

**16/3,AB/7 (Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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004085455

WPI Acc No: 1984-230996/198437

XRAM Acc No: C84-097528

**Clamping matrix to electroforming cathode - using threaded positioning  
pin and lock knob**

Patent Assignee: RCA CORP (RADC )

Inventor: **WEAVER C A**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4468290	A	19840828	US 83535712	A	19830926	198437 B

Priority Applications (No Type Date): US 83535712 A 19830926

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4468290	A		6		

Abstract (Basic): US 4468290 A

Article having a centre hole (pref. a record matrix) is positioned and held in liq. tight electrical contact with a conducting member (pref. an electroforming cathode) having a projecting threaded stud by: (a) placing the article into contact with the member, with the centre hole concentric to the stud; (b) threading onto the stud a positioning pin having an external threaded portion and a locating surface that closely engages the centre hole; and (c) turning a knob, having an abutting surface and an internal threaded portion engaging the external threaded portion of the positioning pin, until the abutting surface presses against the article.

Also claimed are electroforming appts. and a record matrix positioning/holding appts. for the above process.

ADVANTAGE - Electrolyte damage to the threaded stud is prevented; back plating of the matrix and damage to the back plate are prevented; low electrical resistance is maintained between the matrix and the cathode to prevent burnouts and 'treeing' about the centre hole; and the concentricity of the stamper centre hole wrt. the signal grooves, replicated on the stamper surface, is greatly improved to enhance final product quality and increase yield.

/5

16/3,AB/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003910349

WPI Acc No: 1984-055893/198409

XRAM Acc No: C84-023659

XRPX Acc No: N84-042222

**Electroforming matrix for record stamper prodn. - having seal zone with rectangular spiral groove**

Patent Assignee: RCA CORP (RADC )

Inventor: JOHN G; **WEAVER C A** ; WIERSCHKE D J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4431487	A	19840214	US 83509595	A	19830630	198409 B

Priority Applications (No Type Date): US 83509595 A 19830630

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4431487	A		6		

Abstract (Basic): US 4431487 A

The record matrix has a circumferential seal zone contiguous with its unrecorded circumferential zone, the seal zone being of predetermined width and having a rectangular spiral groove of given groove width, groove depth and groove pitch to form an electrolyte-tight seal of a replica to the matrix surface. After electroforming and removal of the metal replica (stamper) from the matrix, the seal zone is trimmed off and the outer and inner edges are coined.

The edge seal improves the matrixing process so that there is no staining or leakage of electrolyte and there is virtually no premature separation of the replica from the matrix, resulting in a higher yield of stampers.

0/6

16/3,AB/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003443807

WPI Acc No: 1982-01688E/198201

**Hardening and passivating record stamper - by cathodic treatment in aq.**

**passivating agent soln.**

Patent Assignee: RCA CORP (RADC )

Inventor: **WEAVER C A**

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4305795	A	19811215				198201 B

Priority Applications (No Type Date): US 81223480 A 19810108

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4305795	A	6		

Abstract (Basic): US 4305795 A

A metal record stamper is hardened and passivated by connecting it as a cathode in an aq. soln. of 0.15-1.0 g/l passivation agent (sodium and/or potassium dichromate and/or permanganate) and supplying current at 4-6.5 A/sq.dm. cathodic current density to cause evolution, at the cathode, of hydrogen which reacts with the surface of the stamper.

The process provides stampers (esp. of nickel) with scratch resistance and release properties at least equivalent to those of chromium plated stampers. The stamper surface is inert to chemical attack, esp. staining, and has a greater prodn. life than chromium-plated stampers.

The process is inexpensive and causes no substantial pollution problems, unlike chromium plating. The treatment causes no substantial change in the recorded signal so the playback fidelity of the records is improved and stampers used e.g. in video disc mfr. can be treated.



File 2:INSPEC 1969-2001/Feb W1  
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 File 99:Wilson Appl. Sci & Tech Abs 1983-2001/Dec  
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09/329,659

Set	Items	Description
S1	653	AU=FENTON D?
S2	273	AU=FENTON, D?
S3	854	S1 OR S2
S4	11672440	INSUR? OR PROCESS? OR APPLICAT?
S5	89	S3 AND S4
S6	57	RD (unique items)
S7	221	AU=TRAYNOR J?
S8	220	AU=TRAYNOR, J?
S9	436	S7 OR S8
S10	436	S9 NOT S3
S11	24	S10 AND S4
S12	18	RD (unique items)
S13	844	AU=SILVER E?
S14	1079	AU=SILVER, E?
S15	1694	S13 OR S14
S16	1694	S15 NOT (S3 OR S9)
S17	214	S16 AND S4
S18	195	S17 NOT PY=1999:2001
S19	4908664	COMPUTER? OR SOFTWARE?
S20	16	S18 AND S19

S21	12	RD (unique items)
S22	0	AU=CARFAGNO K?
S23	0	AU=CARFAGNO, K?
S24	1076	AU=WEAVER, C?
S25	1180	AU=WEAVER C?
S26	2063	S24 OR S25
S27	2063	S26 NOT (S3 OR S9 OR S15)
S28	242	S27 AND S4
S29	33	S28 AND S19
S30	28	RD (unique items)

6/3,AB/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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03289728 INSPEC Abstract Number: A89017881, B89009563

**Title: Spliceless single-mode fibre component assemblies**

Author(s): Kennedy, A.J.; Tobin, A.N.; Hart, T.R.; **Fenton, D.C.** ; Rider, A.R.

Author Affiliation: Sifam Ltd., Torquay, UK

Journal: Proceedings of the SPIE - The International Society for Optical Engineering vol.949 p.119-23

Publication Date: 1988 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

Conference Title: Sixth International Conference on Fibre Optics and Opto-Electronics: Fibre Optics '88

Conference Sponsor: Electron. Components Ind. Federation; Inst. Meas. & Control; IERE; et al

Conference Date: 26-28 April 1988 Conference Location: London, UK

Language: English

Abstract: Assemblies of single-mode fibre components have been manufactured on single lengths of fibre, thus avoiding problems associated with splices such as connection losses and unwanted back reflections. Components based on the fused and polished fibre technologies have been networked into specialised assemblies for sensor (particularly interferometric) signal **processing** and telecommunications systems. Examples are given of practical assemblies and limits on the ability to manufacture are discussed.

Subfile: A B

6/3,AB/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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02823860 INSPEC Abstract Number: B87016095

**Title: Test methods for evaluating transient torsional vibrations in drive trains**

Author(s): **Fenton, D.A.** ; Boisvert, M.; van der Spek, R.

Conference Title: Record of Conference Papers. 28th IEEE Cement Industry Technical Conference (Cat. No.86CH2257-4) p.403-18

Publisher: IEEE, New York, NY, USA

Publication Date: 1986 Country of Publication: USA 466 pp.

U.S. Copyright Clearance Center Code: CH2257-4/86/0000-0403\$01.00

Conference Sponsor: IEEE

Conference Date: 19-22 May 1986 Conference Location: Salt Lake City, UT, USA

Language: English

Abstract: It is argued that initial shock **application** torque can be optimized as a result of strain gauge measurements. The salinity of the liquid rheostats and strategy for controlling the mill up to its rated speed can also be assessed. The measurement of transient torsional vibrations using strain gauge methods is described. Two systems consisting of a wound rotor motor, reduction box, pinion, and bull gear to mill were measured. System 1 was subject to a systems analysis which gave a minimum shock load to the gears and optimum settings for the liquid rheostats. A minimal systems analysis was performed on system 2. Large shock loads caused torsional vibrations at start-up. These undesirable shock load characteristics were reduced in magnitude by diluting the electrolyte in the rheostat and measuring the shaft and pinion tooth microstrains, confirming the improvement. Case histories of wound motor systems and synchronous drives are also given.

Subfile: B

6/3,AB/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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02571036 INSPEC Abstract Number: B86007350

**Title: Torsional vibration analysis and comprehensive field testing on a large rotary kiln (cement industry)**

Author(s): **Fenton, D.A.** ; Taylor, R.M.; Salzborn, D.C.; Mayer, C.B.

Author Affiliation: Vibratex Services Inc., Georgetown, Ont., Canada

Journal: IEEE Transactions on Industry Applications vol.IA-21, no.4

p.1030-8

Publication Date: July-Aug. 1985 Country of Publication: USA

CODEN: ITIACR ISSN: 0093-9994

U.S. Copyright Clearance Center Code: 0093-9994/85/0700-1030\$01.00

Language: English

**Abstract:** Despite recent advances in maintenance and lubrication technology for large machinery, many gear-driven rotary machines are plagued with heavy wear and recurrent failure. In many cases, these problems are due to torsional vibration. The use of modal analysis and strain gage measurements to investigate vibration problems is an effective technique which is extensively used in the aerospace, turbomachinery, and automotive fields. A comprehensive torsional analysis and field testing program undertaken to evaluate and correct operational problems in a dual pinion drive rotary kiln is described. The machine studied is a 115\*5.2 m dry **process** cement kiln with a rated throughput of 3220 metric tons per day. The drive system comprises two 700 hp rated DC electric motors driving two pinions through 43:1 reducing boxes.

Subfile: B

6/3,AB/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

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02490341 INSPEC Abstract Number: A85087435

**Title: Possible applications of digital analysis of ultrasonic images of the placenta**

Author(s): Crawford, D.C.; Morris, D.T.; **Fenton, D.W.** ; Pryce, W.I.

Author Affiliation: Northern Gen. Hospital, Sheffield, UK

Journal: Ultrasound in Medicine & Biology vol.11, no.1 p.79-84

Publication Date: Jan.-Feb. 1985 Country of Publication: UK

CODEN: USMBA3 ISSN: 0301-5629

U.S. Copyright Clearance Center Code: 0301-5629/85\$3.00+.00

Language: English

**Abstract:** Analysis of the digitised ultrasonic images of in vivo placentae at 15-18 weeks gestation has revealed various textural differences. These have been correlated with smoking, visual appearance and the subsequent development of hypertension. The total number of patients included in this study was 98, of which 70 had images suitable for analysis. There were no significant textural differences between the images of the placentae of smokers and nonsmokers nor did the spatially dependent co-occurrence matrices correlate with visual appearance. Textural differences were however detected when the placentae of the normotensive group were compared to those of patients who subsequently developed hypertension (latent hypertension) in the third trimester of pregnancy ( $p < 0.05$  Mann Whitney 'U' test).

Subfile: A

6/3,AB/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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02372661 INSPEC Abstract Number: B85005751

**Title: Elimination of electromechanical drive system problems during the design process**

Author(s): Mayer, C.B.; Crescenzo, P.J.; **Fenton, D.A.**

Author Affiliation: General Electr. Co, Schenectady, NY, USA

Journal: IEEE Transactions on Industry Applications vol.IA-20, no.4, pt.1 p.873-80

Publication Date: July-Aug. 1984 Country of Publication: USA

CODEN: ITIACR ISSN: 0093-9994

U.S. Copyright Clearance Center Code: 0093-9994/84/0700-0873\$01.00

Language: English

Abstract: Many high-horsepower drive trains have experienced premature failures with extremely expensive downtime. Simple repair/replacement actions taken frequently lead to repeat failures within ever shorter periods. Many of the system characterizations which lead to these failures are shown to be identifiable by a thorough analysis during the design phase. A side-by-side comparison of characteristics of the initial and final designs is given.

Subfile: B

6/3,AB/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

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02192494 INSPEC Abstract Number: A84021530, B84012516

**Title: Operational characterization of the solar-thermal power system near Willard, New Mexico**

Author(s): Krivokapich, G.A.; Fenton, D.L. ; Abernathy, G.H.; Otts, J.V.

Author Affiliation: New Mexico State Univ., Las Cruces, NM, USA

Journal: Transactions of the ASME. Journal of Solar Energy Engineering  
vol.105, no.3 p.268-76

Publication Date: Aug. 1983 Country of Publication: USA

CODEN: JSEEDO ISSN: 0199-6231

Language: English

Abstract: The output capacity of the solar-thermal power system located near Willard, New Mexico was 19 kw (25 hp), with primary **application** for irrigation pumping. Solar radiation was collected with north-south axis, east-west tracking, parabolic trough collectors having a total aperture area of 1275 m/sup 2/ (13720 ft/sup 2/). Thermal storage was adequate for 20 hr of power system operation utilizing a reaction-type turbine in conjunction with an organic Rankine-cycle heat engine. Operating efficiencies for the turbine component, heat engine, and the complete power system were 65-80 percent, 10-16 percent, and 1-3 percent, respectively. With the Willard system fully operational and near-term hardware improvement, an annual performance of 22 kw hr/m/sup 2/ of collector aperture area could be expected. Examples of component operation under variable environmental conditions are presented for the winter and summer seasons. Maintenance experience with the Willard system is also given.

Subfile: A B

6/3,AB/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

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02112782 INSPEC Abstract Number: B83052870

**Title: Elimination of electromechanical drive system problems during the design process**

Author(s): Crescenzo, P.J.; Fenton, D.A. ; Mayer, C.B.

Conference Title: Twenty-Fifth IEEE Cement Industry Technical Conference  
p.8 pp.

Publisher: IEEE, New York, NY, USA

Publication Date: 1983 Country of Publication: USA 592 pp.

U.S. Copyright Clearance Center Code: CH1903-4/83/0000-0003\$01.00

Conference Sponsor: IEEE

Conference Date: 22-27 May 1983 Conference Location: San Antonio, TX, USA

Language: English

Abstract: Many high horsepower drive trains have experienced premature failures with extremely expensive downtime. Simple repair/replacement actions taken frequently lead to repeat failures within even shorter periods. The paper shows that many of the system characteristics which lead to these failures are identifiable by a thorough analysis during the design phase. A side by side comparison of characteristics of the initial and final designs is given.

Subfile: B

6/3,AB/8 (Item 1 from file: 108)  
DIALOG(R)File 108:AEROSPACE DATABASE  
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00874283 N77-13573

**Turbine-engine-particulate sampler: Design study**

Final Report, 1 Feb. - 30 Jun. 1975

FENTON, D. L.

IIT Research Inst., Chicago, IL.

CORPORATE CODE: IA915240

SPONSOR CODE: SD261436

May 1976 69P.

REPORT NO.: AD-A027499; IITRI-C6330-5; SAM-TR-76-1

CONTRACT NO.: F41609-75-C-0024; AF PROJ. 7164

A turbine-engine-particulate sampler was designed to maximize overall collected mass for subsequent polynuclear aromatic (PNA) compounds and polycyclic aromatic material analyses. Special design features significantly reduce sample degradation problems and constrain total sampling time to 30 minutes. The sampling concept is a result of a comprehensive literature search and thorough analysis. This PNA sampler extracts the exhaust sample through a multiple-point probe, transports the sample to a conditioner, and collects the particles onto a glass-fiber filter. The conditioner not only reduces the sample temperature, permitting condensation, but also simulates the atmospheric dilution **process**. A bypass circuit permits sampler operation without actually collecting particles (Author (GRA))

6/3,AB/9 (Item 2 from file: 108)  
DIALOG(R)File 108:AEROSPACE DATABASE  
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00708459 A75-35354

**Washout coefficients for scavenging of rocket exhaust HCl by rain**

KNUTSON, E. O.; FENTON, D. L.; WALANSKI, K.; STOCKHAM, J. D. (IIT Research Institute, Chicago, Ill.)

In: Conference on Aerospace and Aeronautical Meteorology, 6th, El Paso, Tex., November 12-15, 1974, Preprints. (A75-35351 16-47) Boston, Mass., American Meteorological Society, 1974, p. 12-17.

1974 12 REFS.

The present work describes a parametric mathematical study of the 'washout' **process** that could take place when a rain falls through an inadequately dispersed exhaust cloud from a rocket using ammonium perchlorate-based solid fuel. In addition, a direct scavenging experiment using confined exhaust clouds from small solid-fuel rockets is reported. The parametric scavenging study predicted that the washout coefficient is proportional to R to the 0.59 power, where R is rainfall intensity in mm/hr, and to a humidity factor. Experiments supported the theory in that the washout coefficient was found to be nearly independent of HCl concentrations. However, the predicted strong dependence of the washout coefficient upon humidity was not observed (P.T.H.)

6/3,AB/10 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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03815137

E.I. No: EIP94031232725

**Title: Glycol concentration requirements for freeze burst protection**

Author: Craig, N.C.; Jones, B.W.; Fenton, D.L.

Corporate Source: Black and Veatch, Inc, Kansas City, MO, USA

Conference Title: Proceedings of the 1993 Annual Meeting of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Conference Location: Denver, CO, USA Conference Date: 19930627-19930630

E.I. Conference No.: 20196

Source: ASHRAE Transactions v 99 pt 2 1993. Publ by ASHRAE, Atlanta, GA, USA. p 200-209

Publication Year: 1993

CODEN: ASHTAG ISSN: 0001-2505

Language: English

Abstract: This study was conducted to determine experimentally the concentrations of ethylene glycol and propylene glycol required to provide freeze burst protection for heat exchange equipment. In order to make use of this freeze protection, provision for volume expansion must be included for the heat exchangers in the system design. Care should be taken in extending the results of this study to other **applications** . (Author abstract) 2 Refs.

6/3,AB/11 (Item 2 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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03491431

E.I. Monthly No: EI9210126616

**Title: Analysis of thermal systems using the entropy balance method.**

Author: Huang, C. L. D.; Fartaj, S. A.; Fenton, D. L.

Corporate Source: Kansas State Univ, Manhattan, KS, USA

Source: International Journal of Energy Research v 16 n 3 Apr 1992 p 189-202

Publication Year: 1992

CODEN: IJERDN ISSN: 0363-907X

Language: English

Abstract: This study investigates the applicability of the second law of thermodynamics using an entropy balance method to analyse and design thermal systems. As examples, the entropy balance method is used to analyse a single stage chiller system and a single stage heat transformer, both with lithium-bromide/water as the working fluid. The entropy method yields not only the same information as is conveyed by the methods of energy and exergy analysis, but it also predicts clearly the influence of irreversibilities of individual components on the coefficient of performance and its effectiveness, based on the **process** properties, rather than on ambient conditions. Furthermore, this method is capable of presenting the overall distribution of the heat input by displaying the additional heat required to overcome irreversibility of each component without ambiguity. (Author abstract)

6/3,AB/12 (Item 3 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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02846576

E.I. Monthly No: EIM9001-000576

**Title: Experimental investigation to improve and control the repeatability of the heat source used in the aircraft and ordnance safety program.**

Author: Gunaji, M. V.; Fenton, D. L. ; Linley, L. J.

Corporate Source: Lockheed-ESC, Las Cruces, NM, USA

Conference Title: Heat Transfer Phenomena in Radiation, Combustion, and Fires Presented at the 1989 National Heat Transfer Conference

Conference Location: Philadelphia, PA, USA Conference Date: 19890806

E.I. Conference No.: 12606

Source: American Society of Mechanical Engineers, Heat Transfer Division, (Publication) HTD v 106. Publ by American Soc of Mechanical Engineers (ASME), New York, NY, USA. p 327-338

Publication Year: 1989

CODEN: ASMHD8 ISSN: 0272-5673

Language: English

Abstract: The Naval Weapons Center (NWC) at China Lake subjects various ordnance devices, such as bombs and rockets, to conditions representative of a fire caused by an accidental fuel spill on an aircraft carrier deck. This paper describes the investigation of various techniques to improve the

control and the repeatability of the heat source (pool fire) used in the Aircraft and Ordnance Safety Program at China Lake. Only those techniques that would not alter the structure of the pool fire were considered. Using wind screens with a porosity of 37 percent outside the pool radius, appeared to be the most promising technique because the screens would reduce the wind-velocity and still allow the fire to entrain air. Several wind profile tests were performed to evaluate the effectiveness of the screens. To eliminate the uncertainty in scaling, full-scale tests were performed using screen heights of 3.6 m and 6.0 m. The ratio of the wind velocities inside to outside the screens (K//s) decreased with increased wind velocities for the shorter screens, but was nearly constant (K//s equals 0.18 for a wind velocity up to 8.2 m/s) for the 6.0-m-high screen. (Edited author abstract) 9 Refs.

6/3,AB/13 (Item 4 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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02784713

E.I. Monthly No: EI8909083815

**Title: Chemostat study of kinetics of human lymphokine synthesis in recombinant Escherichia coli.**

Author: Curless, C. E.; Forrer, P. D.; Mann, M. B.; Fenton, D. M. ; Tsai, L. B.

Corporate Source: Amgen, Thousand Oaks, CA, USA

Source: Biotechnology and Bioengineering v 34 n 3 Jul 1989 p 415-421

Publication Year: 1989

CODEN: BIBIAU ISSN: 0006-3592

Language: English

Abstract: Recombinant technology has made it possible to produce commercially important proteins by fermenting recombinant microorganisms. Before scaling up a fermentation **process**, it is desirable to find conditions that will optimize recombinant protein production. Some fermentation variables that are of importance in recombinant gene expression include cell concentration, specific growth rate, plasmid copy number, and gene transcription and translation efficiency. The chemostat is a device that allows one to conduct a systematic study of these variables. 20 Refs.

6/3,AB/14 (Item 5 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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02763243

E.I. Monthly No: EI8907061833

**Title: Optimization of a staged investment in an NGL processing plant.**

Author: Gallier, Paul W.; Kisala, Thomas P.; Mock, Theresa L.; Fenton, David J.

Corporate Source: Aspen Technology Inc, Cambridge, MA, USA

Conference Title: Preprint - American Institute of Chemical Engineers

Conference Location: New Orleans, LA, USA Conference Date: 19880306

E.I. Conference No.: 12138

Source: American Institute of Chemical Engineers, National Meeting. Publ by AIChE, New York, NY, USA. 81E 34p

Publication Year: 1988

CODEN: ACENC9

Language: English

Abstract: This paper shows how **process** flowsheet simulation integrated with computer-based capital equipment costing and economic analysis can be used to optimize the net present value of an on-shore NGL terminal facility. An example is shown using the ASPEN PLUS **process** simulator. By utilizing the sequential quadratic program (SQP) optimizer in ASPEN PLUS, an example shows how it can automatically find an optimum value of net present value for the project by searching the design variables of the **process** design. 13 Refs.



6/3,AB/15 (Item 6 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01875154

E.I. Monthly No: EIM8506-032614  
**Title: DESIGN AND APPLICATION OF HYDRODYNAMIC BEARINGS FOR LARGE DIAMETER MACHINES.**  
Author: **Fenton, Dennis Arthur** ; Taylor, Robert Meighen; Weir-Jones, Ian  
Corporate Source: Vibratex Services Inc, Georgetown, Ont, Can  
Conference Title: SME-AIME Annual Meeting.  
Conference Location: New York, NY, USA Conference Date: 19850224  
E.I. Conference No.: 06495  
Source: Preprint - Society of Mining Engineers of AIME Publ by Soc of Mining Engineers of AIME, Littleton, CO, USA 85-14, 10p  
Publication Year: 1985  
CODEN: PMAID6  
Language: English

Abstract: The current industry trend towards increasing size and energy efficiency has resulted in renewed interest in the advantages of hydrodynamic bearings. These advantages include structural improvements, reduced bearing friction, improved bearing life, improved transient characteristics, and reduced lubricant pump size and power requirements. In particular, the higher energy efficiency results in substantial savings on large machines. This paper describes some aspects of the design of large hydrodynamic bearings based on thirty years of experience in the design of such bearings on grinding mills ranging in journal size from 2.1 m to 6.4 m. 5 refs.

6/3,AB/16 (Item 7 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01593034

E.I. Monthly No: EI8411119000  
E.I. Yearly No: EI84067313  
**Title: OPERATION AND EVALUATION OF THE WILLARD SOLAR THERMAL POWER IRRIGATION SYSTEM.**  
Author: **Fenton, Donald L.** ; Abernathy, George H.; Krivokapich, Gary A.; Otts, John V.  
Corporate Source: New Mexico State Univ, Dep of Mechanical Engineering, Las Cruces, NM, USA  
Source: Solar Energy v 32 n 6 1984 p 735-751  
Publication Year: 1984  
CODEN: SRENA4 ISSN: 0038-092X  
Language: ENGLISH

Abstract: The operation of the Willard solar thermal power system is analyzed and evaluated. The 19 kw (25 hp) power system was coupled to a shallow well and sprinkler system near Willard, New Mexico irrigating approximately, 49 hectares. The specific performance of the major subsystems - collector array, thermal storage, and the organic working fluid Rankine cycle heat engine - were determined. Over the summer months, the daily collector array efficiency (based on direct solar radiation normalized in the plane of collector aperture) was nominally 25 percent and heat engine rankine cycle efficiency 15 percent. These conversion efficiencies coupled with the numerous system losses resulted in an overall efficiency of nearly 3 percent on clear summer days. 14 refs.

6/3,AB/17 (Item 8 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01110468

E.I. Monthly No: EI8204031636  
E.I. Yearly No: EI82064878

**Title: CHEMISTRY OF SHALE OIL AND ITS REFINED PRODUCTS.**

Author: **Fenton, Donald M.** ; Hennig, Harvey; Richardson, Ryden L.

Corporate Source: Union Oil Co of Calif, Brea, USA

Source: Preprints of Papers - American Chemical Society, Division of Fuel Chemistry v 25 n 3 1980, San Francisco, Calif, USA, Aug 24-29 1980 p 102-109

Publication Year: 1980

CODEN: ACFPAI ISSN: 0569-3772

Language: ENGLISH

Abstract: General information about oil shale and its **processing** is followed by presentation of data on chemical composition and some physical properties of oil shale, crude shale oil, and refined shale oil. Chemistry and property data of shale oil fuel are compared with those of synthetic fuel obtained by coal conversion and of petroleum products. 5 refs.

6/3,AB/18 (Item 9 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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01005198

E.I. Monthly No: EI8103020195

E.I. Yearly No: EI81002155

**Title: PERFORMANCE DATA FROM REDUCED LEVELS OF INSTRUMENTATION IN SOLAR HEATED AND/OR COOLED BUILDINGS.**

Author: Packard, C. J.; San Martin, R. L.; **Fenton, D.**

Corporate Source: Alternative Energy Resour Inc, El Paso, Tex

Source: Sun 2, Proc of the Int Sol Energy Soc Silver Jubilee Congr, Atlanta, Ga, May 1979 v 2. Publ by Pergamon Press, Elmsford, NY and Oxford, Engl, 1979 p 1445-1449

Publication Year: 1979

Language: ENGLISH

Abstract: This paper recognizes that the construction rate of solar heated and/or cooled buildings has increased in the United States. This paper develops a methodology of instrumentation system design which supports multiple levels of hardware complexity and associated cost and allows valid performance comparisons to be made between solar buildings employing these different levels of instrumentation. 4 refs.

6/3,AB/19 (Item 10 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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00992517

E.I. Monthly No: EI8102018593

E.I. Yearly No: EI81088969

**Title: SOLAR COLLECTOR DESIGN -- HIGH TEMPERATURE.**

Author: Abernathy, George H.; **Fenton, Donald L.** ; Krivokapich, Gary

Corporate Source: NM State Univ, Las Cruces

Source: Pap ASAE presented at Summer Meet, San Antonio, Tex, Jun 15-18 1980. Publ by ASAE, St. Joseph, Mich, 1980 Pap 80-4036, 12 p

Publication Year: 1980

CODEN: AAEP CZ ISSN: 0145-0166

Language: ENGLISH

Abstract: Concentrating collectors are practical to collect solar energy in temperature ranges that exceed those of flat-plate collectors. This paper discusses design and **application** of parabolic troughs with north-south orientations. Two parabolic trough fields have been evaluated at the Willard Solar Pumping facility. Differences in operating efficiencies are reported for the reflective surfaces used.

6/3,AB/20 (Item 11 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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00923858

E.I. Monthly No: EI8006048375

E.I. Yearly No: EI80085324

**Title: CHEMISTRY OF THE BEAVON SULFUR REMOVAL PROCESS.**

Author: **Fenton, Donald M.** ; Gowdy, Hugh W.

Corporate Source: Union Oil Co of Calif, Brea

Source: Environment International v 2 n 3 1979 p 183-186

Publication Year: 1979

CODEN: ENVIDV ISSN: 0160-4120

Language: ENGLISH

Abstract: The Beavon Sulfur Removal **Process** (BSRP) removes essentially all of the sulfur compounds from Claus plant tail gases. The sulfur containing compounds, such as hydrogen sulfide, sulfur dioxide, carbonyl sulfide and carbon disulfide, are converted to sulfur in over 99. 9% efficiency. The BSRP consists of two stages. In the first stage the various sulfur compounds are either hydrogenated or hydrolyzed to give hydrogen sulfide while in the second stage the hydrogen sulfide is oxidized using the Stretford **process** to give elemental sulfur of good quality. The **process** is a commercial success with 29 plants operating or under construction in the United States and 4 in Japan. This **process** can also be utilized in Synthetic Natural Gas plants, natural gas **processing** , and other similar **applications** .

6/3,AB/21 (Item 12 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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00877839

E.I. Monthly No: EI7912099293

E.I. Yearly No: EI79090443

**Title: MEASUREMENTS IN A DILUTE PHASE GAS-SOLID SUSPENSION.**

Author: **Fenton, D. L.** ; Stukel, J. J.; Morr, G. F.

Source: Meas in Polyphase Flows, Pap presented at the Winter Annu Meet of ASME, San Francisco, Calif, Dec 10-15 1978 Publ by ASME, New York, NY, 1978 p 107-114

Publication Year: 1978

Language: ENGLISH

Abstract: Specific measurement techniques applicable to a dilute gas-solid suspension are described. The conditions associated with a dilute suspension are identified. Each of the techniques developed is directed to a single bulk characteristic of the gas-solid suspension. The suspension characteristics measured are the gaseous velocity, particulate mass flux, particulate charge-to-mass ratio, and particulate concentration. Typical results are shown indicating the range of **application** . 17 refs.

6/3,AB/22 (Item 13 from file: 8)

DIALOG(R)File 8:EI Compendex(R)

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00289918

E.I. Monthly No: EI7303012562

E.I. Yearly No: EI73019847

**Title: NEW ROUTE TO ACRYLIC ACID.**

Author: Olivier, K. L.; **Fenton, D. M.** ; Biale, J.

Corporate Source: Union Oil Co of Calif, Brea

Source: Hydrocarbon Processing v 51 n 11 Nov 1972 p 95-96

Publication Year: 1972

CODEN: HYPRAX ISSN: 0018-8190

Language: ENGLISH

Abstract: A new technological route to acrylic acid is described. It uses ethylene in the place of acetylene, carbon dioxide and palladium catalyst. Under anhydrous conditions ethylene reacts with carbon monoxide and oxygen in acetic acid solution to form a mixture of acrylic acid and BETA -acetoxypropionic acid (BAPA). BAPA is cracked thermally to yield additional quantities of acrylic acid. Simplified flow diagram of the synthesis of acrylic acid as well as some **processing** parameters are included in this report. 9 refs.

6/3,AB/23 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abstracts Online  
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01573083 AADMM15844

**THE APPLICATION OF NOAA STRATEGIC ASSESSMENT TO THE SHELLFISH CLOSURE  
ISSUE IN SOUTHWESTERN NEW BRUNSWICK**

Author: FENTON, DEREK GERALD  
Degree: M.E.S.  
Year: 1996  
Corporate Source/Institution: DALHOUSIE UNIVERSITY (CANADA) (0328)  
Source: VOLUME 35/05 of MASTERS ABSTRACTS.  
PAGE 1348. 249 PAGES  
ISBN: 0-612-15844-6

Shellfish closures are a serious environmental and economic concern in the coastal zone of southwestern New Brunswick. Using coastal zone management literature as a guide to the required management approach there is a need to have greater levels of integration, coordination, and multi-stakeholder involvement. The objective of this thesis was to apply several aspects of the Strategic Assessment methodology developed by NOAA to determine its role in dealing with the closure issue. A highly structured workshop based on the Strategic Assessment methodology and related "knowledge-engineering" tools was utilized and evaluated. Twenty participants from both governmental agencies and non-governmental groups identified and prioritized the primary management problems and strategies available to alleviate the current situation. In addition, an evaluation of the implementation requirements for the "strategic plan" developed was conducted.

Based on questionnaire and interview results, participants approved of the overall workshop methodology, the steps undertaken, and the inclusion of a variety of stakeholders in the planning **process**. Most participants approved of the workshop results and indicated the workshop provides an initial step towards dealing with the closure issue in the region. The "knowledge-engineering" methods used proved to be the most problematic aspect of the workshop for many of the participants.

Those interviewed advocated a locally based approach to implementing the strategic plan with the development of a Strategic Assessment Team (SAT) consisting of a wide variety of governmental and non-governmental participants. The SAT is envisioned to be coordinated and facilitated by the community-based groups in the region which were initiated under the Atlantic Coastal Action Program.

The framework and approach to decision-making developed by NOAA provides a useful means of addressing the closure issue and as a means to incorporate a wide variety of interests.

6/3,AB/24 (Item 2 from file: 35)  
DIALOG(R)File 35:Dissertation Abstracts Online  
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650741 AAD7908909

**ELECTROANALYTICAL STUDIES OF MULTI-ELECTRON PROCESSES IN BINUCLEAR  
COMPLEXES CONTAINING TRANSITION METALS.**

Author: FENTON, DAVID EARL  
Degree: PH.D.  
Year: 1978  
Corporate Source/Institution: WAYNE STATE UNIVERSITY (0254)  
Source: VOLUME 39/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 4880. 214 PAGES

6/3,AB/25 (Item 1 from file: 103)  
DIALOG(R)File 103:Energy SciTec  
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03988712 EDB-96-072472

**Title: Operating characteristics of a flame/oxidizer for the disposal of ammonia from an industrial refrigeration facility**

Author(s): **Fenton, D.L.** ; Chapman, K.S.; Kelley, R.D.; Khan, A.S.  
(Kansas State Univ., Manhattan, KS (United States). Mechanical Engineering Dept

**Title: ASHRAE transactions 1995: Technical and symposium papers. Volume 101, Part 2**

Conference Title: Annual meeting of the American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. (ASHRAE)

Conference Location: San Diego, CA (United States) Conference Date: 24-28 Jun 1995

Publisher: Atlanta, GA (United States) American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

ISSN: 0001-2505

Publication Date: 1995 p 463-475 (1497 p)

Report Number(s): CONF-950624--

Language: English

**Abstract:** The disposal of ammonia released from an industrial refrigeration facility may be accomplished by combustion in a flare or oxidizer. An experimental chamber was fabricated whereby a venturi section separated the combustion zone from the mixing chamber where the supply gases entering were mixed. Using natural gas as the pilot fuel, the flare was operated over the entire flammable region where the combustion temperature and exhaust products were measured. For lean fuel (ammonia and natural gas) combustion conditions and ammonia supply content less than 10% of the total by volume, the ammonia exhaust concentrations were less than 5 ppm. However, the NO<sub>x</sub> concentrations over the same region sometimes exceeded 1,000 ppm. Mineral, paraffinic, and polyester-based oils in weight concentrations 20% and above with ammonia reduced the lower flammability limit (LFL) of ammonia-air mixtures to 12%, 9%, and 8% by volume, respectively. The injection of liquid ammonia to the natural gas pilot flame yielded exhaust ammonia concentrations less than 5 ppm when ammonia to natural gas mass ratios were less than 0.5.

6/3,AB/26 (Item 2 from file: 103)

DIALOG(R)File 103:Energy SciTec

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03719677 AIX-25-062523; EDB-94-135643

**Title: An inventory of disused sealed radioactive sources in Ireland**

Author(s)/Editor(s): **Fenton, D.M.** ; Hone, C.P.; Turvey, F.J.

(Radiological Protection Inst. of Ireland (Ireland

Corporate Source: Radiological Protection Inst. of Ireland (Ireland)

Publication Date: Apr 1994 (13 p)

Report Number(s): RPII-94/1

Order Number: DE94636653

Language: English

**Abstract:** Radioactive material in both sealed and unsealed forms is imported for use under licence from the Radiological Protection Institute of Ireland in industrial, medical and laboratory applications. It is a condition of licence that all sealed radioactive sources be returned to the supplier at the end of their useful lives. However, there is a significant number of redundant sealed sources in storage which were either imported before the licensing system came into force in 1977, or which were purchased from manufacturers/suppliers which have ceased trading. Since there is no central radioactive waste storage or disposal facility in Ireland, the custodians of such sources are obliged to store them on their premises. An inventory of disused sources was carried out by the Institute to determine the quantity and types of sources which are in storage in the country awaiting disposal. 2 refs.

6/3,AB/27 (Item 3 from file: 103)

DIALOG(R)File 103:Energy SciTec

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03407105 NOV-92-045032; EDB-92-169862

**Title: Desalination of backish water of brine from hydrocarbon wells**

Author(s)/Editor(s): **Fenton, D.M.**

Patent No.: US 5128042 A

Patent Assignee(s): Union Oil Co. of California, Los Angeles, CA (United States)

Priority No.: US 7-722010

Patent Date Filed: 27 Jun 1991

Publication Date: 7 Jul 1992 (vp.)

Language: In English

**Abstract:** This patent describes an apparatus for producing non-brackish water from water containing at least 500 ppm total dissolved solids found in an active hydrocarbon product well. It comprises at least one active hydrocarbon product well located on an offshore oil platform; a means for separating the hydrocarbon product from the water; a desalination plant located on the offshore platform for receiving water containing at least 500 ppm total dissolved solids from the means for separating and for producing non-brackish water; and means for transporting non-brackish water produced by the desalination plant. This paper also describes a method of using an inactivated gas well. It comprises ceasing all gas production in an inactive gas well; recovering water containing at least 500 ppm total dissolved solids from the inactive gas well from a geological formation containing flowable water containing at least 500 ppm total dissolved solids; and desalinating the water to produce liquid water having less than 500 ppmw total dissolved solids.

**6/3,AB/28 (Item 4 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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03316740 NOV-92-023022; EDB-92-090384

**Title: Desalination of brackish water from oil wells**

Author(s)/Editor(s): **Fenton, D.M.**

Patent No.: US 5076934 A

Patent Assignee(s): Union Oil Co. of California, Los Angeles, CA (United States)

Priority No.: US 7-659027

Patent Date Filed: 21 Feb 1991

Publication Date: 31 Dec 1991 (vp.)

Language: In English

**Abstract:** This patent describes an apparatus for producing non-brackish water from brackish water found in an inactivated oil well. It comprises at least one inactive oil well located on an offshore oil platform, the well having a perforated well casing at a level of a geological formation known to contain flowable brackish water; a desalination plant located on the offshore platform receiving flowable brackish water from the inactive oil well; and means to transport the non-brackish water produced by the desalination plant. This patent also describes a method of using an inactivated oil well. It comprises ceasing oil production in an inactive oil well having a well casing that penetrates a plurality of geological formations; recovering brackish water from the inactive oil well from a geological formation containing flowable brackish water; and desalinating the brackish water producing non-brackish water.

**6/3,AB/29 (Item 5 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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02789129 EDB-90-006342

**Title: The petroleum environmental research forum**

Author(s): **Fenton, D.M.** ; Ouimette, J.R. (Chevron Research Company, Richmond, CA (USA

Conference Title: Symposium on refinery waste cleanup  
Conference Location: New Orleans, LA (USA) Conference Date: 30 Aug - 4  
Sep 1987

Source: American Chemical Society, Division of Petroleum Chemistry,  
Preprints (USA) v 32:3. Coden: ACPCA ISSN: 0569-3799

Publication Date: Aug 1987 p 744-746

Report Number(s): CONF-8708313--

Language: In English

**Abstract:** Because of mankind's increased understanding of the effect of his activities on the environment, both good and bad, that led and will continue to lead to significant changes in these activities, and because in many cases, there is neither sufficient information as to what effects these changes will cause, nor optimum **processes** to achieve these changes, there became a real and increasing need to conduct environmental research and development. Unfortunately, present resources, i.e., facilities, expertise and money, are stretched to the limit. We felt the answer was cooperative environmental research, which would augment individual company research and yet not demand complete industry consensus, which might delay implementation. This paper discusses the formation of a new organization called the Petroleum Environmental Research Forum (PERF). It was formed in 1986 to stimulate cooperative research for developing new pollution control technology for the petroleum industry. It was formed in partial response to two opposing forces -- petroleum industry requirements for cost cutting during lean economic times and public demands for tougher environmental regulations and controls. This paper will discuss the incentive for forming PERF, how it functions, its activities to date, and a brief description of current projects.

6/3,AB/30 (Item 6 from file: 103)

DIALOG(R)File 103:Energy SciTec

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02292789 FRC-89-000821; EDB-89-038526

**Title:** Step optimisation of investments in a gas treatment terminal

Author(s): Gallier, P.W.; Kisala, T.P.; Mock, T.L.; Fenton, D.J. ;  
Harant, P.; Trevino-Lozano, R

Source: Inf. Chim. (France) v 299. Coden: INFCA

Publication Date: Nov 1988 p 243-249

Language: French

**Abstract:** The need to make numerous decisions and compromises, some imposed by the economic considerations of profitability and operating costs, are described in this article; this shows the value of employing a plant simulation and carrying out economic evaluations in order to optimise the actual net value of investments in units for liquid natural gas treatment. Coupled with a method of non-linear optimisation the simulator can automatically determine the optimal profitability after employing an analysis with a hundred or more variables, each of which has an influence on the unit.

6/3,AB/31 (Item 7 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

02124504 GBN-88-000378; EDB-88-067231

**Title:** Alkali metals and group IIA metals

Author(s): Fenton, D.E. ; Wilkinson, Geoffrey; Gillard, R.D. ;  
McCleverty, J.A. (eds

Affiliation: Sheffield Univ. (UK)

**Title:** Comprehensive coordination chemistry. The synthesis, reactions, properties and applications of coordination compounds. V.3. Main group and early transition elements

Publisher: Pergamon Press, Oxford, GB

Publication Date: 1987 p 1-80

Language: English

**Abstract:** This chapter on the coordination complexes of the alkali metals

of group IIA starts with a historical perspective of their chemistry, from simple monodentate ligands, metal-..beta..-diketonates to the macrocyclic polyethers which act as ligands to the alkali and alkaline earth metals. Other macrocyclic ligands include quarterenes, calixarenes, porphyrins, phthalocyanines and chlorophylls. A section on the naturally occurring ionophores and carboxylic ionophores is included.

**6/3,AB/32 (Item 8 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

01776495 EDB-86-100208

Author(s): **Fenton, D. M.**

**Title: Arsenic removal from shale oils**

Patent No.: US 4551237

Patent Assignee(s): Union Oil Company of California

Patent Date Filed: Filed date 25 Jun 1982

Publication Date: 5 Nov 1985 p v

Language: English

Abstract: Shale oil produced from arsenic-containing oil shale is treated with an aqueous solution of one or more sulfide materials and separated therefrom, yielding an oil fraction of reduced arsenic content. Preferred sulfide materials include ammonium sulfide and ammonium polysulfide.

**6/3,AB/33 (Item 9 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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01658037 ERA-10-051341; EDB-85-164817

Author(s): **Fenton, D.L.** ; **Gunaji, M.V.**; **Gregory, W.S.**; **Martin, R.A**

**Title: Investigation of high-efficiency particulate air filter plugging by combustion aerosols**

Corporate Source: Los Alamos National Lab., NM (USA)

Publication Date: May 1985 p 27

Report Number(s): NUREG/CR-4264; LA-10436-MS

Order Number: TI85014223

Contract Number (DOE): W-7405-ENG-36

Language: English

Abstract: Experiments were conducted to investigate high-efficiency particulate air (HEPA) filter plugging by combustion aerosols. These tests were done to obtain empirical data to improve our modeling of filter plugging phenomena using the Los Alamos National Laboratory fire accident analysis code FIRAC. Commercially available 0.61-m by 0.61-m square filters were tested in a specially designed facility to determine how airflow resistance varies with increased filter loading by combustion aerosols. Two organic fuels normally found in nuclear fuel cycle facilities, polystyrene (PS) and polymethylmethacrylate (PMMA), were burned under varied conditions to generate combustion aerosols. The test facility included a combustor, a 23-m-long duct, and a specially designed gravimetric balance for determining the aerosol mass gain of the filters. Test results include correlations of HEPA filter resistance ratios (actual resistance/initial resistance) with aerosol mass gain. The mass gain of plugged HEPA filters was found to correlate with the airborne mass concentration of material in the size range greater than approximately 2.0 ..mu..m. Also, the fuel with a smaller soot fraction, PMMA, produced filter plugging at lower accumulated aerosol mass deposits on or within the filter.

**6/3,AB/34 (Item 10 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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01504107 EDB-85-010866



Author(s): **Fenton, D.M.**

**Title: Arsenic removal method**

Patent No.: US 4454027

Patent Assignee(s): Union Oil Company of California

Patent Date Filed: Filed date 16 Aug 1982

Publication Date: 12 Jun 1984 p v

Language: English

Abstract: Aqueous and organic fluids which contain arsenic are contacted with spent oil shale from an oil shale retorting operation and separated therefrom, yielding a fluid of reduced arsenic content. In one embodiment, shale oil is placed in contact with spent oil shale under conditions of elevated temperature and pressure to reduce the arsenic content of the oil.

**6/3,AB/35 (Item 11 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

01443185 EDB-84-140988

Author(s): Gowdy, H.W.; **Fenton, D.M.**

**Title: Method for removing hydrogen sulfide from gas streams**

Patent No.: US 4432962

Patent Assignee(s): Union Oil Company of California

Patent Date Filed: Filed date 6 Oct 1982

Publication Date: 21 Feb 1984 p v

Language: English

Abstract: A hydrogen sulfide removal and conversion method in which a hydrogen sulfide-containing gas stream is contacted with a regenerable washing solution having a pH between about 5 and about 10 and containing solubilized vanadium, thiocyanate ions, a carboxylate complexing agent, one or more water-soluble quinones and one or more water-soluble nonquinone aromatic compounds capable of solubilizing tetravalent vanadium. The absorbed hydrogen sulfide is converted to elemental sulfur which, after oxidative regeneration of the washing solution, is separated from the regenerated solution.

**6/3,AB/36 (Item 12 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

01388070 EDB-84-085867

**Title: Washout of combustion-generated hydrogen chloride**

Author(s): **Fenton, D.L.** ; Purcell, R.Y.; Hrdina, D.; Knutson, E.O

Affiliation: IIT Research Inst., Chicago, IL

Source: Atmos. Environ. (United Kingdom) v 14. Coden: ATENB

Publication Date: 1980 p 1055-1062

Language: English

Abstract: The hydrogen chloride (HCl) washout coefficient associated with the exhaust ground cloud of a solid propellant rocket was experimentally determined by:  $\lambda = (5.12 \times 10^{-5}) M A^{-1} R^{-1}$  where  $\lambda$  is the washout coefficient ( $s^{-1}$ ),  $M$  the mass concentration of HCl ( $g\ HCl/m^3$ ) and  $R$  the rainfall intensity ( $mm/h$ ). Although the mathematical model developed for HCl washout predicts a reduction of the washout coefficient at sufficiently high relative humidities (above approx 80%), the experimental data indicates no significant reduction.

**6/3,AB/37 (Item 13 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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01387308 INS-84-010844; ERA-09-026742; EDB-84-085105

**Title: HEPA filter loading by combustion products**

Author(s): **Fenton, D.L.** ; Gunaji, M.V.; Tang, P.K.; Martin, R.A

**Title: Proceedings of the CSNI specialist meeting on interaction of fire and explosion with ventilation systems in nuclear facilities. Volume II**

Corporate Source: Los Alamos National Lab., NM (USA)

Conference Title: CSNI specialist meeting on interaction of fire and explosion with ventilation systems in nuclear facilities

Conference Location: Los Alamos, NM, USA Conference Date: 25 Apr 1983

Publication Date: Oct 1983 p 405-417

Report Number(s): LA-9911-C-Vol.2; CSNI-83-Vol.2; CONF-830442-Vol.2

Order Number: TI84003977

Language: English

**Abstract:** Experiments have been conducted with 0.61m x 0.61m square commercially available HEPA (high efficiency particulate air) filters determining how airflow resistance varies with collected particulate mass. The combustion of two organic fuels - polystyrene and polymethylmethacrylate (PMMA) - at varying conditions generated the particulate material plugging the filters. Results indicate that the resistance ratio (actual filter resistance/initial filter resistance) correlates the filter mass gain for given conditions. For varying conditions, the airborne particulate mass concentration of particles greater than approximately 2.0..mu.. correlates the mass gain of plugged filters. The equipment used in the experiments included: a pressurized combustor, an airflow facility (23m duct length), and a specially designed gravimetric balance for determining HEPA filter weight gain.

**6/3,AB/38 (Item 14 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

01147976 EDB-83-047994

Author(s): **Fenton, D.M.** ; Vaell, R.P

**Title: Reducing the consumption of anthraquinone disulfonate in Stretford solutions (Patent)**

Patent No.: US 4060594

Patent Assignee(s): Union Oil Co California

Patent Date Filed: Filed date 21 May 1975

Publication Date: 29 Nov 1977 p v

Language: English

**Abstract:** A **process** is described for treating a hydrogen sulfide-containing hydrogenated Claus **process** tail gas to convert the hydrogen sulfide to elemental sulfur. The gas is contacted with an aqueous alkaline solution containing a water-soluble metal vanadate, a water-soluble anthraquinone disulfonate, and a water-soluble, inorganic fluoride, borate or phosphate complexing agent to yield an effluent gas of reduced sulfur content. The solution thereafter is regenerated by contact with an oxygen-containing gas, elemental sulfur is recovered from the solution, and the regenerated solution is recycled to the gas-contacting step. The complexing agent contained in the solution reduces the chemical consumption of the anthraquinone disulfonate. (4 claims)

**6/3,AB/39 (Item 15 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

00963121 EDB-82-137976

Author(s): **Fenton, D.M.** ; Gowdy, H.W

**Title: Method for removing hydrogen sulfide from gas streams (Patent)**

Patent No.: US 4325936

Patent Assignee(s): Union Oil Co Of California

Patent Date Filed: Filed date 12 Feb 1981

Publication Date: 20 Apr 1982 p v

Language: English

**Abstract:** A hydrogen sulfide removal and conversion method in which a hydrogen sulfide-containing gas stream is contacted with a regenerable

washing solution containing solubilized vanadium thiocyanate ions, a carboxylate complexing agent and one or more water-soluble quinones capable of solubilizing tetravalent vanadium. The molar ratio of vanadium to quinone(S) in the washing solution is selected to substantially reduce or eliminate the formation of contaminant sulfate salts. The absorbed hydrogen sulfide is converted to elemental sulfur which, after oxidative regeneration of the washing solution, is separated from the regenerated solution.

6/3,AB/40 (Item 16 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

00952615 EPA-08-003533; ERA-07-050794; NTS-82-009587; EDB-82-127469

Author(s): Birchfield, J.L.; Wade, D.W.; Bulpitt, W.S.; Harris, D.;  
Muller, J.; Hodges, W.; Robinson, W.; Williams, R.; Lederle, G.;  
Fenton, D.

**Title: Feasibility study for non-conventional fuel use for an industrial integrated energy system, La Grange, Georgia**

Corporate Source: Georgia Inst. of Tech., Atlanta (USA). Engineering  
Experiment Station Sverdrup and Parcel and Associates, Inc., St.  
Louis, MO (USA) Georgia Forestry Commission, Atlanta (USA)

Publication Date: Mar 1981 p 258

Report Number(s): DOE/CS/40245-T1

Order Number: DE82010086

Contract Number (DOE): AC05-79CS40245

Language: English

**Abstract:** A feasibility study for the construction and operation of a wood-fired combined heat and power production plant has been conducted in conjunction with the development of a 600-acre Industrial Park. Several options are available to system planners which include phasing of the plant in small increments, producing steam as a primary energy source, producing electricity as a primary energy source, and using various local wood resources for fuel. Wood wastes found at wood products industries, sawmills, and residue left in the forest after harvesting are evaluated as a renewable energy source for the central energy plant. Both thermal and electrical energy production are evaluated for its cost effectiveness in the LaGrange situation. Alternative fuel sources including coal, oil, and municipal refuse are also being considered as back-up fuel supplies. Key elements of the study include: (1) a thorough search of literature concerned with wood as an energy source, wood harvesting techniques, and wood combustion equipment; (2) a technical analysis of the industrial park's energy requirements through a survey conducted by Georgia Tech; (3) development of a design criteria for the central energy system along with the investigation of alternative energy supply schemes. To avoid any adverse impacts on air and water quality in the LaGrange area, an investigation of environmental impacts was conducted during the study. In addition, cost analyses including life cycle benefits, operating and ownership arrangements, and alternative financing schemes are explored.

6/3,AB/41 (Item 17 from file: 103)

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

00854840 EPA-08-001205; ERA-07-014859; EDB-82-029679

Author(s): Abernathy, G.H.; Fenton, D.C.; Patterson, R.C

**Title: Utilization of dry agricultural wastes as an energy source for irrigation pumping. Technical report, February 1, 1980-September 30, 1981**

Corporate Source: New Mexico State Univ., Las Cruces (USA). New Mexico  
Energy Inst.

Publication Date: Sep 1981 p 30

Report Number(s): NP-2901088; EMD-2-68-2212

Order Number: DE82901088

Language: English

Abstract: Assembling a 50-hp steam engine for powering an irrigation pump fueled by agricultural wastes is discussed. This engine consists of a boiler fired by agricultural wastes such as milo stalks, straw, or other residue to produce steam at the rate of 2500 pounds per hour and delivered at a pressure of 300 psi. This is utilized by a rankine type impulse turbine, which rotates at a speed of about 4400 rpm, but is geared down to a pump drive speed of 2200 rpm. The steam from the turbine is condensed using the irrigation water and is returned to the boiler through a boiler feed pump. The engine skid and the boiler trailer were assembled. Preliminary tests were conducted and several short term runs were accomplished. The turbine easily powered the pump but the condenser did not operate correctly. The fuel feed and firebox did not perform as expected and some redesign will be necessary. The unit is expected to utilize about 400 pounds per hour of average agricultural waste material. This feed rate reflects a low operating efficiency which is typical of steam equipment that is available on the market today.

6/3,AB/42 (Item 18 from file: 103)  
DIALOG(R)File 103:Energy SciTec  
(c) 2001 Contains copyrighted material. All rts. reserv.

00266835 ERA-02-045080; EDB-77-105027

Author(s): **Fenton, D.M.**

**Title: Recarbonation of spent oil shale** (Patent^ wetting with aqueous carbonate solutions)

Patent No.: US 4016239

Patent Assignee(s): Union Oil Co. of California

Patent Date Filed: Filed date 22 May 1975

Publication Date: 5 Apr 1977 p 8

Language: English

Abstract: Spent oil shale from retorting operations, containing water-soluble alkaline oxides such as calcium oxide is subjected to a recarbonation **process** in order to reduce its alkalinity and thereby prevent ecological damage to plant and aquatic animal life which could result from alkaline leachings derived from rain or snowfall on open dumps of such spent shale. For economic reasons, a rapid recarbonation is necessary, and such is achieved by wetting the spent shale with water containing dissolved carbonate and/or bicarbonate salts, and contacting the wetted spent shale with an atmosphere comprising a substantial partial pressure of carbon dioxide for a period of time ranging between about 10 minutes and two hours. 10 claims.

6/3,AB/43 (Item 1 from file: 6)  
DIALOG(R)File 6:NTIS  
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1282620 NTIS Accession Number: DE86015349

**Fire-Accident Analysis Code (FIRAC) Verification**

Nichols, B. D. ; Gregory, W. S. ; **Fenton, D. L.** ; Smith, P. R.

Los Alamos National Lab., NM.

Corp. Source Codes: 072735000; 9512470

Sponsor: New Mexico State Univ., Las Cruces.; Department of Energy, Washington, DC.

Report No.: LA-UR-86-2680; CONF-860820-7

1986 11p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI8708; NSA1100

19. DOE/NRC nuclear air cleaning conference, Seattle, WA, USA, 17 Aug 1986.

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NTIS Prices: PC A02/MF A01

The FIRAC computer code predicts fire-induced transients in nuclear fuel cycle facility ventilation systems. FIRAC calculates simultaneously the gas-dynamic, material transport, and heat transport transients that occur in any arbitrarily connected network system subjected to a fire. The network system may include ventilation components such as filters, dampers, ducts, and blowers. These components are connected to rooms and corridors to complete the network for moving air through the facility. An experimental ventilation system has been constructed to verify FIRAC and other accident analysis codes. The design emphasizes network system characteristics and includes multiple chambers, ducts, blowers, dampers, and filters. A larger industrial heater and a commercial dust feeder are used to inject thermal energy and aerosol mass. The facility is instrumented to measure volumetric flow rate, temperature, pressure, and aerosol concentration throughout the system. Aerosol release rates and mass accumulation on filters also are measured. We have performed a series of experiments in which a known rate of thermal energy is injected into the system. We then simulated this experiment with the FIRAC code. This paper compares and discusses the gas-dynamic and heat transport data obtained from the ventilation system experiments with those predicted by the FIRAC code. The numerically predicted data generally are within 10% of the experimental data. (ERA citation 11:053655)

**6/3,AB/44 (Item 1 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

11062149 PASCAL No.: 93-0569158

**Effect of retinoids on follicular cells**

**Fundamentals of hair biology**

BAZZANO G; TEREZAKIS N; ATTIA H; BAZZANO A; DOVER R; **FENTON D** ; MANDIR N ; CELLENO L; TAMBURRO M; JACONI S

Tulane univ. medical school, dep. dermatology, New Orleans LA, USA

Annual symposium on the biology of skin, 41 (Snowmass Village CO USA)

1992-07-25

Journal: Journal of investigative dermatology, 1993, 101 (1 SUP )  
138S-142S

Language: English

It has been demonstrated that topical **application** of all-trans retinoic acid and other retinoids can alter the hair-growth cycle in the C SUB 3 H mouse model. The anagen phase is prolonged and the telogen phase is shortened. This effect is similar to the effect of minoxidil on the hair-cycle dynamics in this animal model. The levels of cellular retinoic acid binding protein measured by radioreceptor assay in whole skin of C SUB 3 H mice were higher during anagen and lower during telogen. Topical **application** of certain retinoids caused elevated levels of cellular retinoic acid-binding protein (cRABP) in the whole skin homogenates during both phases of the cycle

**6/3,AB/45 (Item 2 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

10655243 PASCAL No.: 93-0164527

**Synthesis and application of macrocyclic and macroacyclic schiff bases**

GUERRIERO P; VIGATO P A; **FENTON D E** ; HELLIER P C

CNR, ist. chimica tecnologia radioelementi, 35100 Padova, Italy

Journal: Acta chemica scandinavica : (Copenhagen. 1989), 1992, 46 (11)  
1025-1046

Language: English

**6/3,AB/46 (Item 3 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

09082995 PASCAL No.: 90-0251346

**The more-complete-expansion cycle applied to irrigation engines**

EAKIN G R; FENTON D L ; SCHROCK M D

Osborne industries, Osborne KS, USA

Journal: SAE Transactions, 1989, 97 (part. 6) 1690-1696

Language: English

Agricultural irrigation pumps are frequently powered by common automobile or tractor spark-ignition (SI) engines burning natural gas. Investigated was the fuel consumption reduction that occurs with **application** of the more-complete-expansion cycle. Using a Chevrolet 5.74 liter (350 cubic inch) displacement engine for calculation purposes, fuel consumption rates are predicted as 12 to 16% less than a conventional engine. Economic analysis reveals that with irrigation pumps operating from 1000 to 2000 hr/year, the cost of modification is recovered by fuel savings (\$0.97 per kg of natural gas) in one to two years

**6/3,AB/47 (Item 4 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

08217574 PASCAL No.: 88-0218011

**Single-cell light scatter as a probe of retractile body formation in recombinant Escherichia coli**

WITTRUP K D; MANN M B; FENTON D M ; TSAI L B; BALLEY J E

California inst. technology, Pasadena CA 91125, USA

Journal: Bio/technology Nature Publishing Company, 1988, 6 (4) 423-426

Language: ENGLISH

**Application** de la cytométrie de flux a l'étude de l'accumulation intracellulaire de protéines hétérologues dans des corps d'inclusion chez des souches recombinantes d'Escherichia coli (cas particulier de la production d'interféron et d'hormones de croissance animales)

**6/3,AB/48 (Item 5 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

06092967 PASCAL No.: 85-0354589

**Application of recombinant DNA technologies to studies on chicken growth hormone**

SOUZA L M; BOONE T C; MURDOCK D; LANGLEY K; WYPYCH J; FENTON D ; JOHNSON S; LAI P H; EVERETT R; ROU-YIN HSU; BOSSELMAN R

Amgen, Thousand Oaks CA 91320, USA

Journal: Journal of experimental Zoology, 1984, 232 (3) 465-473

Language: English

**6/3,AB/49 (Item 6 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

05581582 PASCAL No.: 84-0081909

**The synthesis of macrocyclic lanthanide complexes derived from 2,5-furandialdehyde and alpha , omega -alkanediamines**

ABID K K; FENTON D E

Univ., dep. chemistry, Sheffield S3 7HF, United Kingdom

Journal: Inorganica chimica acta, 1984, 82 (2) 223-226

Language: English

Préparation des complexes et **application** éventuelle dans les réactions de transmétallation

**6/3,AB/50 (Item 7 from file: 144)**

DIALOG(R)File 144:Pascal

(c) 2001 INIST/CNRS. All rts. reserv.

02410651 PASCAL No.: 79-0321852

**MONONUCLEAR AND HOMOBINUCLEAR LEAD(II) COMPLEXES OF MACROCYCLIC SCHIFF**

## BASES

COOK D H; **FENTON D E** ; DREW M G B; RODGERS A; MCCANN M; NELSON S M  
UNIV. DEP. CHEM., SHEFFIELD S3 7HF, UNITED KINGDOM  
Journal: J. CHEM. SOC., DALTON TRANS., 1979 (2) 414-419  
Language: ENGLISH

PREPARATION DE COMPLEXES MONONUCLEAIRES DE COORDINATS PENTADENTES A 15 ET 17 MEMBRES, DE COMPLEXES MONONUCLEAIRES DE COORDINATS HEXADENTES A 18 MEMBRES ET DE COMPLEXES DINUCLEAIRES D'UN COORDINAT DECADENTE A 30 MEMBRES. STRUCTURES MOLECULAIRES. **APPLICATIONS** POSSIBLES EN CHELATOTHERAPIE DE L'EMPOISONNEMENT PAR PB

6/3,AB/51 (Item 8 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2001 INIST/CNRS. All rts. reserv.

02132430 PASCAL No.: 78-0298931

**A UNIQUE TWO-ELECTRON, REVERSIBLE REDUCTION OF A BINUCLEAR COPPER(II) COMPLEX. OBSERVATION OF THE ELECTROCHEMICAL BEHAVIOR PREDICTED BY POLCYN AND SHAIN FOR THE SEQUENTIAL TRANSFER OF TWO ELECTRONS AT THE SAME POTENTIAL.**

**FENTON D E** ; SCHROEDER R R; LINTVEDT R L  
DEP. CHEM., WAYNE STATE UNIV., DETROIT, MICH. 48202  
Journal: J. AMER. CHEM. SOC., 1978, 100 (6) 1931-1932  
Language: ENGLISH

DONNEES SUR LA REDUCTION D'UN COMPLEXE BINUCLEAIRE DE CU FAISANT INTERVENIR UN **PROCESSUS** EN 2 ETAPES REVERSIBLES, CHAQUE ETAPE A 1 ELECTRON AYANT DES VALEURS DE E SUB 1/2 IDENTIQUES. RESULTATS D'UNE ETUDE PAR VOLTAMMETRIE CYCLIQUE ET PAR POLAROGRAPHIE SUR ELECTRODE A GOUTTE DE HG.

6/3,AB/52 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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04906807 Genuine Article#: UQ942 Number of References: 67

**Title: METAL-COMPLEXES OF BIBRACCHIAL SCHIFF-BASE MACROCYCLES** (Abstract Available)

Author(s): COLLINSON SR; **FENTON DE**

Corporate Source: UNIV SHEFFIELD, DEPT CHEM, DAINTON BLDG/SHEFFIELDS3 7HF/S YORKSHIRE/ENGLAND/; UNIV SHEFFIELD, DEPT CHEM/SHEFFIELD S3 7HF/S YORKSHIRE/ENGLAND/

Journal: COORDINATION CHEMISTRY REVIEWS, 1996, V148, FEB (FEB), P19-40  
ISSN: 0010-8545

Language: ENGLISH Document Type: ARTICLE

Abstract: This article discusses polynuclear metal complexes of Schiff base macrocycles and their potential **application** to the modelling of metallobiosites, in particular di- and tri-nuclear copper(II)-containing sites. A brief perspective of the area is presented and then the article addresses the development of pyridinyl-derived bibracchial (doubly pendant-armed) Schiff base macrocycles and their metal complexes. The cleft-like configurations of the complexes bear resemblance to the metal-containing pockets present in metalloproteins. A 'first generation' model for the trinuclear copper site in ascorbate oxidase, and a dinuclear manganese(II) complex bearing a single acetato-bridge, and which may have relevance to the modelling of dinuclear manganese biosites, are discussed. An extension of the work to thiophene-derived macrocycles and their dicopper(I) complexes is also presented.

6/3,AB/53 (Item 2 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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04479641 Genuine Article#: TD335 Number of References: 0

**Title: VASCULAR ANATOMY OF THE CERVICAL CORD - MR ANGIOGRAPHIC**

APPLICATIONS

Author(s): FLOWERS CH; SIMON AM; PAPATHANASIOU MA; **FENTON DS** ; WANG J  
Journal: RADIOLOGY, 1995, V197, S (NOV), P492  
ISSN: 0033-8419  
Language: ENGLISH Document Type: MEETING ABSTRACT

**6/3,AB/54 (Item 3 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2001 Inst for Sci Info. All rts. reserv.

04213956 Genuine Article#: RP069 Number of References: 66

**Title: LINEAR TRINUCLEAR COPPER(II) COMPLEXES DERIVED FROM ACYCLIC  
HEXADENTATE SCHIFF-BASE LIGANDS** (Abstract Available)

Author(s): BAILEY NA; **FENTON DE** ; HE QY; TERRY N; HAASE W; WERNER R  
Corporate Source: UNIV SHEFFIELD, DEPT CHEM, DAINTON BLDG/SHEFFIELDS3 7HF/S  
YORKSHIRE/ENGLAND/; UNIV SHEFFIELD, DEPT CHEM/SHEFFIELD S3 7HF/S  
YORKSHIRE/ENGLAND/; TH DARMSTADT, INST CHEM PHYS/D-64287  
DARMSTADT//GERMANY/

Journal: INORGANICA CHIMICA ACTA, 1995, V235, N1-2 (JUL), P273-279  
ISSN: 0020-1693

Language: ENGLISH Document Type: ARTICLE

Abstract: New linear trinuclear copper(II) complexes, 1 and 2, derived from two acyclic hexadentate (N4O2) Schiff base ligands were synthesised and characterised. Each complex consisted of two ligand molecules sharing three copper(II) atoms and two anions. The X-ray crystal study of 2 revealed that the three copper(II) atoms form an exact linear arrangement having Cu(2) on the inversion centre and a Cu(1)-Cu(2) distance of 3.985 Angstrom. The central copper(II) is situated at the centre of the plane defined by an N2O2 square-planar coordination geometry. The coordination sphere (N3O) of each terminal copper(II) can be described as strongly distorted tetrahedral. The cyclic voltammograms of the complexes demonstrated two quasi-reversible reductions in which one is a redox **process** of two one-electron steps, associated with the two terminal copper(II) ions, and the second is the electron transfer **process** of the central copper(II).

**6/3,AB/55 (Item 4 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2001 Inst for Sci Info. All rts. reserv.

02530474 Genuine Article#: LH988 Number of References: 14

**Title: METAL-ION RECOGNITION - THE STORY OF AN OXA AZA MACROCYCLE** (Abstract Available)

Author(s): **FENTON DE**

Corporate Source: UNIV SHEFFIELD, DEPT CHEM/SHEFFIELD S3 7HF/S  
YORKSHIRE/ENGLAND/

Journal: PURE AND APPLIED CHEMISTRY, 1993, V65, N7 (JUL), P1493-1498  
ISSN: 0033-4545

Language: ENGLISH Document Type: ARTICLE

Abstract: The interaction of a pyridine-derived dioxo-triaza-macrocycle with divalent first row transition metal cations is discussed. Selected crystal structures and speciation studies are presented together with information on **application** to metal extraction and transport.

**6/3,AB/56 (Item 5 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
(c) 2001 Inst for Sci Info. All rts. reserv.

00878404 Genuine Article#: FD034 Number of References: 16

**Title: RESPONSES OF CONCRETE WALLS TO FIRE** (Abstract Available)

Author(s): HUANG CLD; AHMED GN; **FENTON DL**

Corporate Source: KANSAS STATE UNIV AGR & APPL SCI, DEPT MECH ENGN, DURLAND  
HALL/MANHATTAN//KS/66506

Journal: INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, 1991, V34, N3, P  
649-661



Language: ENGLISH Document Type: ARTICLE

Abstract: Understanding the phenomena of coupled heat and mass transfer in concrete structures subject to high temperatures in a short duration has essential **applications** in the safety assessment of nuclear reactors and of tall buildings. In this paper a mathematical model, simulating the coupled heat and mass transfer in concrete structures at elevated temperatures as fire, has been developed and numerically solved. The numerical results predict the phenomenon of 'moisture clog' and the explosive spalling of concrete under fire. The investigations show that the seal layer as a fire protection has significant effects on the pore pressure buildup in the concrete walls which, in turn, improves the susceptibility of fire damage.

6/3,AB/57 (Item 6 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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00706663 Genuine Article#: EP098 Number of References: 21

**Title: TRIPODAL BENZIMIDAZOLATE COMPLEXES OF TRICARBONYLMOLYBDENUM(0) AND OF IRON(III)** (Abstract Available)

Author(s): CRANE JD; **FENTON DE**

Corporate Source: UNIV SHEFFIELD, DEPT CHEM/SHEFFIELD S3 7HF/S  
YORKSHIRE/ENGLAND/

Journal: JOURNAL OF THE CHEMICAL SOCIETY-DALTON TRANSACTIONS, 1990, N12, P 3647-3653

Language: ENGLISH Document Type: ARTICLE

Abstract: The reactions of the tripodal ligands

N,N-bis(benzimidazol-2-ylmethyl)amine (L1),

N,N-bis(benzimidazol-2-ylmethyl)methylamine (L2), and

N,N-bis(1-methylbenzimidazol-2-ylmethyl)-methylamine (L3) with

molybdenum hexacarbonyl and tris(acetonitrile)tricarbonylmolybdenum to give (benzimidazolato)tricarbonylmolybdenum complexes, and of L1 and L3

with iron (III) salts to give di-iron(III) complexes containing the [Fe<sub>2</sub>(μ-O)(μ-RCO<sub>2</sub>)<sub>2</sub>]<sup>2+</sup> core are described. The **application** of the

molybdenum complexes as i.r. spectroscopic probes for the ligand bands

in the dinuclear species is reported, together with the mass spectra

and electronic spectra of the di-iron(III) species. The di-iron(III)

complexes show an ability to undergo carboxylate exchange reactions.

12/3,AB/1 (Item 1 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
(c) 2001 Engineering Info. Inc. All rts. reserv.

03881082

E.I. No: EIP94061315760

**Title: Temperature variation in calendering and its relationship to SPC analysis of layflatness**

Author: Tseng, A.A.; Wang, S.R.; Traynor, J.S. ; Kothari, J.B.

Corporate Source: Drexel Univ, Philadelphia, PA, USA

Source: Journal of Plastic Film & Sheeting v 10 n 1 Jan 1994. p 21-64

Publication Year: 1994

CODEN: JPFSEH ISSN: 8756-0879

Language: English

**Abstract:** In calendering, the major challenge is to produce polymer sheets and films with uniform gauge and good layflatness. In this paper, the basic operating parameters which influence the product shape quality or layflatness are reviewed. Temperature sensors have been implemented in an industrial scale calendering line to measure the temperature of calender rolls and materials insitu, with the goal to provide a basis for identifying the causes of the layflat problem. The sensors and procedures adopted are described. The sensing results and their relationship to layflatness are also discussed. Some temperature irregularities have been found, and identified as major contributors to the layflat problem. This finding has been further confirmed by a Statistical **Process** Control (SPC) study. In the SPC study, the sensing data have been analyzed, and a correlation between temperature distributions and layflat behavior of the final product has been found. An active control strategy integrating the on-line sensing and SPC concept has then been developed to alleviate layflatness problems. Finally, this paper concludes by identifying those areas where further work is needed. (Author abstract) 13 Refs.

12/3,AB/2 (Item 1 from file: 77)  
DIALOG(R)File 77:Conference Papers Index  
(c) 2000 Cambridge Sci Abs. All rts. reserv.

4173565

Supplier Accession Number: 95-06083

V23N06

**Application of a one-dimensional geostatistical procedure to fisheries acoustic surveys of Alaskan pollock**

Williamson, N.J.; Traynor, J.J.

International Symposium on Fisheries and Plankton Acoustics 9525009  
Aberdeen (Scotland) 12-16 Jun 1995

International Council for the Exploration of the Sea; Institute of Acoustics; Acoustical Society of America; Societe Francaise d'Acoustique

Academic Press, 24-28 Oval Road, London NW1 7DX United Kingdom, Selected full papers available in February 1996. Selected abstracts currently available.

12/3,AB/3 (Item 1 from file: 103)  
DIALOG(R)File 103:Energy SciTec  
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02380534 NLM-89-57394; EDB-89-126508

**Title: (/sup 3/H)diprenorphine binding to kappa-sites in guinea-pig and rat brain: Evidence for apparent heterogeneity**

Author(s): Wood, M.S.; Traynor, J.R.

Affiliation: Univ. of Technology, Loughborough, Leicestershire (England)

Source: J. Neurochem. (United Kingdom) v 53:1. Coden: JONRA

Publication Date: Jul 1989 p 173-178

Language: English

**Abstract:** The binding of the unselective opioid antagonist (/sup 3/H)diprenorphine to homogenates prepared from rat brain and from guinea-pig brain and cerebellum has been studied in HEPES buffer containing 10 mM Mg2+ ions. Sequential displacement of bound (/sup 3/H)diprenorphine by ligands with selectivity for mu-, delta-, and

kappa-opioid receptors uncovers the multiple components of binding. In the presence of cold ligands that occupy all mu-, delta-, and kappa-sites, opioid binding still remains. This binding represents 20% of total specific sites and is displaced by naloxone. The nature of these undefined opioid binding sites is discussed.

**12/3,AB/4 (Item 1 from file: 65)**

DIALOG(R)File 65:Inside Conferences

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01385151 INSIDE CONFERENCE ITEM ID: CN013741583

**Application of a none-dimensional geostatistical procedure to fisheries acoustic surveys of Alaskan pollock**

Williamson, N. J.; Traynor, J. J.

CONFERENCE: Fisheries and plankton acoustics-International symposium

ICES MARINE SCIENCE SYMPOSIA, 1996; ISSUE 202 P: 423-428

Academic Press, 1996

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Simmonds, E. H.; MacLennan, D. N.

CONFERENCE SPONSOR: International Council for the Exploration of the Sea

CONFERENCE LOCATION: Aberdeen

CONFERENCE DATE: Jun 1995 (19950) (19950)

**12/3,AB/5 (Item 2 from file: 65)**

DIALOG(R)File 65:Inside Conferences

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01168108 INSIDE CONFERENCE ITEM ID: CN011455785

**Processing of Dynorphins in the Striato-Nigral Pathway**

Silberring, J.; Sandin, J.; Tan-No, K.; Kasakov, L.

CONFERENCE: International narcotic research conference

ANALGESIA -ELMSFORD-, 1995; VOL 1; NUMBER 4/6 P: 734-737

Cognizant Communication Corporation, 1995

ISSN: 1071-569x

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Traynor, J.

CONFERENCE LOCATION: St Andrews

CONFERENCE DATE: Jul 1995 (199507) (199507)

**12/3,AB/6 (Item 1 from file: 6)**

DIALOG(R)File 6:NTIS

Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

2059169 NTIS Accession Number: MIC-98-01603/XAB

**Watershed Assessment Model (WAM): Final project report**

Traynor, J.

Alberta Environmental Protection, Calgary, (Alberta).

Corp. Source Codes: 999999999; 9999999;

Sponsor: Manning Diversified Forest Products Research Trust Fund; Foothills Model Forest.

c1997 70p

Languages: English

Journal Announcement: GRAI9812

On cover: Forest Development Research Program. Cover title: Watershed Assessment Model (WAM): Final report and GIS user guide. At head of cover title: Manning Diversified Forest Products Research Trust Fund, MDFP 13/95.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC E07/MF E01

The Foothills Model Forest Watershed Assessment Model (WAM) provides information on watersheds, their characteristics, and their resources. WAM presents an integrated approach using the results of computer models,

geographic information systems (GIS), and resource recovery data together with an interactive viewing interface. Outputs provide basin, hydrology, and resource inventory information and hydrology models for selected points or watersheds in the project area. Additional point information from external databases can be linked to these results. This report outlines the characteristics of WAM, the information generated by analyses, data issues, and **processing** requirements. Details are provided on the steps involved on data preparation, using ArcInfo hydrologic analysis tools, calculating watershed characteristics, and generating a stream network. Samples of output datasets are shown and results compared to information generated manually from topographic maps. In addition, the use of watershed information in planning and the value of topographic information generated by GIS are outlined. Results of testing WAM on two diverse landscapes are presented and the strengths and limitations of the stream network generation functions are discussed.

12/3,AB/7 (Item 2 from file: 6)  
DIALOG(R)File 6:NTIS  
Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

2008646 NTIS Accession Number: MIC-97-02865

**Watershed assessment model: Project update, 1995-96**

**Traynor, J.**

Manning Diversified Forest Products Research Trust Fund, Edmonton (Alberta).

Corp. Source Codes: 999999999; 9999999;

Sponsor: Alberta. Alberta Environmental Protection.

Report No.: ISBN-0-7732-5078-6

c1996 17p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI9717

On cover: Forest Development Research Program. At head of title: Manning Diversified Forest Products Research Trust Fund, MDPF 10/95.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC E07/MF E01

Reports progress on development of a watershed assessment model, intended to represent in a computer model a **process** to ensure that fish, stream, hydrological, and land base information is considered when evaluating land management decisions. Scheduled activities include development of an ArcView interface on a UNIX operating system, preparation of fish and stream inventories, regional hydrology studies, gathering of geographic information systems data, and customizing the model for the Foothills Model Forest region in Alberta. Also includes a summary of the proceedings of a workshop held to outline the current status of the watershed program of the Model Forest. The goal of that program is to develop a planning tool and provide managers with better information to evaluate land management alternatives for hydrologic, fisheries, and aquatic habitat values.

12/3,AB/8 (Item 3 from file: 6)  
DIALOG(R)File 6:NTIS  
Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0884216 NTIS Accession Number: PB81-161424/XAB

**An Evaluation of Methods for Indirectly Measuring the Mean Acoustic Scattering Cross Section of Fish**

Ehrenberg, J. E. ; Traynor, J. J. ; Williamson, N. J.

Washington Univ., Seattle. Applied Physics Lab.

Corp. Source Codes: 005042006

Sponsor: National Marine Fisheries Service, Seattle, WA. Northwest and Alaska Fisheries Center.

Report No.: WSG-TA-80-6; NOAA-81011303

c1980 7p

Languages: English Document Type: Journal article

Journal Announcement: GRAI8113

Pub. in Oceans '80, IEEE, p13-17 1980.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02

Acoustic techniques are being used throughout the world for assessment of fish stocks. The most common acoustic assessment technique is to **process** the output of an echo sounder using a procedure called echo integration. This paper discusses two methods for indirectly extracting the mean scattering cross section from the empirical distribution of single fish echo amplitudes. The first method discussed obtains the estimate of mean scattering cross section by first estimating the single fish target strength probability density function. The second method assumes that the square root of the scattering cross section is Rayleigh distributed.

12/3,AB/9 (Item 4 from file: 6)

DIALOG(R)File 6:NTIS

Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0797788 NTIS Accession Number: PB80-121684/XAB

**Productivity Improvement in the Department of Planning and Development**

Traynor, J.

Wilmington Dept. of Planning and Development, DE.

Corp. Source Codes: 057201

Sponsor: Department of Housing and Urban Development, Washington, DC.  
Office of the Assistant Secretary for Policy Development and Research.

Report No.: HUD-0000399

Jan 79 15p

Languages: English

Journal Announcement: GRAI8005

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A02/MF A01

The reorganization of the Department of Planning and Development of the City of Wilmington, Del., is described and illustrated with organizational charts. The previous organization duplicated responsibilities within the Department and did not relate in a clear manner to similar functions performed in other departments. This led to informal relationships with no clear lines of authority. The reorganization grouped related functions within the same division, separated planning and implementation responsibilities, and established a middle management level for each division to relieve community development administrators of their previous heavy workloads. Interviews conducted before the reorganization also indicated that while individuals knew their own responsibilities, no one had a clear idea of the overall work of the Department. Recommendations resulting from this analysis are summarized. Major changes were made in the administration of the loan and grant programs, the vacant housing program, and bid procedures. Separating the contracting **process** for landscaping and demolition saved \$2,500 on 23 properties. By combining bids for similar work for a number of housing rehabilitation projects, larger contractors were encouraged to bid, and economies of scale saved an estimated 15 to 20 percent. Details of these and other changes are given. A work - flow chart and the new loans and grants tracking form are included.

12/3,AB/10 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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13691629 PASCAL No.: 98-0445636

**3-Alkyl ethers of clocinnamox : Delayed long-term mu -antagonists with variable mu efficacy**

HUSBANDS S M; SADD J; BROADBEAR J H; WOODS J H; MARTIN J; TRAYNOR J R ;

ACETO M D; BOWMAN E R; HARRIS L S; LEWIS J W

School of Chemistry, University of Bristol, Cantock's Close, Bristol, BS8 1TS, United Kingdom; Department of Pharmacology, University of Michigan, Ann Arbor, Michigan 48109, United States; Department of Pharmacology and Toxicology, Medical College of Virginia, Richmond, Virginia 23298, United States

Journal: Journal of medicinal chemistry, 1998, 41 (18) 3493-3498

Language: English

In recent years there has been considerable interest in the relationship between clocinnamox (C-CAM) and its methyl ether methoclocinnamox (MC-CAM). While C-CAM appears to be an **insurmountable**  $\mu$ -antagonist, MC-CAM has been shown to be a potent partial agonist at  $\mu$ -opioid receptors. To further investigate this relationship we prepared other ethers of C-CAM and evaluated these in opioid receptor binding assays and in vivo in mouse antinociceptive assays and in morphine-dependent monkeys. In opioid binding assays, the ethers were generally  $\mu$ -selective with affinity equivalent to that of C-CAM itself. Although they displayed little or no efficacy in vitro, some of the ethers showed substantial agonist activity in the in vivo antinociceptive tests. Two of the ethers, the propargyl ether 7 and the cyclopropylmethyl ether 5, were chosen for more detailed analysis in vivo. 7 was shown to have significant  $\mu$ -agonist character and was able to substitute for morphine in morphine-dependent monkeys. Interestingly, when this agonist effect abated, 7 displayed long-lasting  $\mu$ -antagonism. In contrast, 5 displayed little agonist activity in vivo and was characterized as a potent, long-acting  $\mu$  antagonist. Although further work is needed to determine whether metabolism is a crucial factor in determining the pharmacological profile of these ethers, it is clear that 3-O-alkylation is a useful means of varying the  $\mu$  efficacy displayed by this class of acyl-substituted 14-aminomorphinones. MC-CAM itself has generated considerable interest as a potential pharmacotherapy for opiate abuse. These analogues with differing  $\mu$  efficacy but retaining the long-lasting  $\mu$ -antagonist effects provide further opportunities for the development of treatment drugs.

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12/3,AB/11 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal

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13028896 PASCAL No.: 97-0314546

**Target-strength measurements of walleye pollock (*Theragra chalcogramma*) and Pacific whiting (*Merluccius productus*)**

**Fisheries and plankton acoustics : Aberdeen, 12-16 June 1995**

**TRAYNOR J J**

SIMMONDS E John, ed; MACLENNAN David N, ed

Alaska Fisheries Science Center, 7600 Sand Point Way NE, Seattle, WA 98115, United States

ICES international symposium (Aberdeen GBR) 1995-06-12

Journal: ICES Marine science symposia, 1996, 202 253-258

Language: English

The importance of knowledge about the target-strength (TS) characteristics of the surveyed fish population to the accuracy of acoustic assessments using echo integration is well known. The most commonly used TS to length (L) relationship for walleye pollock is based on swimbladder morphology measurements and in situ TS measurements  $TS \text{ (in dB)} = 20 \log L - 66.0$  for fish length in centimeters. For Pacific whiting, TS measurements have not been made over an adequate range of fish lengths to determine the appropriate relationship for use in scaling echo-integration surveys. However, results presented in this paper and elsewhere suggest a smaller TS (about 2 dB for a given length) for 40-60 cm fish. Measurements of the TS of walleye pollock and Pacific whiting were made with a SIMRAD EK500 in the present study. The appropriateness of the currently used TS to length relationship for echo integration scaling is discussed for pollock. The **application** of a TS to length relationship for Pacific whiting is considered. An attempt to use a system with a transducer lowered through the water column to reduce noise-induced bias is described.

12/3,AB/12 (Item 3 from file: 144)

DIALOG(R)File 144:Pascal

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11048982 PASCAL No.: 93-0558523

**Conversion of dynorphin A(1-8) to (Leu SUP 5 )-enkephalin in rat central nervous tissue during development**

DIXON D M; TRAYNOR J R

Loughborough univ. technology, dep. chemistry, United Kingdom

Journal: Neuropeptides : (Edinburgh), 1993, 25 (2) 121-125

Language: English

Rat central nervous tissue contains enzymic activity that is able to convert the kappa -receptor preferring opioid peptide dynorphin A(1-8) to the delta - mu -receptor preferring opioid peptide (Leu SUP 5 )enkephalin. The ontogeny of this conversion **process** has been studied in vitro using cortex, striatum, cerebellum and spinal cord tissues of the developing rat brain. Evidence for the enzymic cleavage of the Leu SUP 5 -Arg SUP 6 bond of dynorphin A(1-8) to afford (Leu SUP 5 )enkephalin was observed as early as neonatal day 1

12/3,AB/13 (Item 4 from file: 144)

DIALOG(R)File 144:Pascal

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09299827 PASCAL No.: 91-0090201

**Evidence that the agonist action of dynorphin A(1-8) in the guinea-pig myenteric-plexus may be mediated partly through conversion to (Leu SUP 5 )enkephalin**

DIXON D M; TRAYNOR J R

Univ. technology, dep. chemistry, Loughborough, Leics. LE11 3TU, United Kingdom

Journal: British journal of pharmacology, 1990, 101 (3) 674-678

Language: English

The endogenous opioid peptide dynorphin A(1-8) was rapidly degraded by slices of myenteric plexus-longitudinal muscle of the guinea-pig ileum. A product of the degradation was the delta -receptor preferring (Leu SUP 5 )enkephalin. Levels of (Leu SUP 5 )enkephalin were markedly increased in the presence of the peptidase inhibitors bestatin, thiorphan and captopril. The results suggest that formation of (Leu SUP 5 )enkephalin from dynorphin A(1-8) may be an important conversion **process**

12/3,AB/14 (Item 5 from file: 144)

DIALOG(R)File 144:Pascal

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08565018 PASCAL No.: 89-0114061

**The Arenig in South Wales: sedimentary and volcanic processes during the initiation of a marginal basin**

(L'Arenig dans le Sud du Pays de Galles: processus sedimentaires et volcaniques durant la formation d'un bassin marginal)

TRAYNOR J J

Department earth sci., Cambridge CB2 3EQ, United Kingdom

Journal: Geological journal, 1988, 23 (4) 275-292

Language: English

12/3,AB/15 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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07795996 Genuine Article#: 209GM Number of References: 27

Title: kappa-opioid receptor effects of butorphanol in rhesus monkeys (

ABSTRACT AVAILABLE)

Author(s): Vivian JA (REPRINT) ; Deyoung MB; Sumpter TL; **Traynor JR** ;  
Lewis JW; Woods JH

Corporate Source: UNIV MICHIGAN, SCH MED, DEPT PHARMACOL, 1301 MED SCI RES  
BLDG 3/ANN ARBOR//MI/48109 (REPRINT); UNIV MICHIGAN, SCH MED, DEPT  
PSYCHOL/ANN ARBOR//MI/48109; UNIV BRISTOL, DEPT  
CHEM/BRISTOL/AVON/ENGLAND/

Journal: JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, 1999, V290  
, N1 (JUL), P259-265

ISSN: 0022-3565 Publication date: 19990700

Publisher: AMER SOC PHARMACOLOGY EXPERIMENTAL THERAPEUTICS, 9650 ROCKVILLE  
PIKE, BETHESDA, MD 20814-3998

Language: English Document Type: ARTICLE

Abstract: Butorphanol and nalbuphine have substantial affinity for mu and kappa-opioid receptor sites, yet their behavioral effects in monkeys are largely consistent with a mu receptor mechanism of action. Using ethylketocyclazocine (EKC) discrimination and diuresis assays in rhesus monkeys (Macaca mulatta), the purpose of the current investigation was to characterize the in vivo kappa-opioid activity of these compounds through the use of an **insurmountable** mu-opioid receptor antagonist, clocinnamox. Alone, butorphanol (0.001-0.032 mg/kg i.m.) failed to generalize to EKC, and pretreatment with the competitive opioid receptor antagonist quadazocine (0.1 or 0.32 mg/kg i.m.) did not alter this generalization. At 24 h after clocinnamox (0.1 mg/kg i.m.) administration, butorphanol fully generalized to EKC, and this generalization was maintained in two of three monkeys at 72 h. Parallel results were observed in diuresis: butorphanol alone and in the presence of quadazocine (1 mg/kg i.m.) did not alter urine output, and a marked diuretic effect was demonstrated 24 h to 2 weeks after clocinnamox administration. Clocinnamox did not alter the discriminative stimulus or diuretic effects of nalbuphine or of the K-opioid receptor agonists EKC or U69593. These results are consistent with an in vivo agonist activity of butorphanol at K-opioid receptors that can only be demonstrated when an **insurmountable** antagonist has substantially eliminated the dominant receptor population through which it exerts its action.

12/3,AB/16 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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06761181 Genuine Article#: ZQ198 Number of References: 12

Title: **Maternal hospital charges associated with trial of labor versus elective repeat cesarean section** (ABSTRACT AVAILABLE)

Author(s): **Traynor JD** ; Peaceman AM (REPRINT)

Corporate Source: 333 E SUPER ST, SUITE 410/CHICAGO//IL/60611 (REPRINT); NW  
MEM HOSP, /CHICAGO//IL/60611; NORTHWESTERN UNIV, SCH MED, DEPT OBSTET &  
GYNECOL/CHICAGO//IL/60611

Journal: BIRTH-ISSUES IN PERINATAL CARE, 1998, V25, N2 (JUN), P81-84

ISSN: 0730-7659 Publication date: 19980600

Publisher: BLACKWELL SCIENCE INC, 350 MAIN ST, MALDEN, MA 02148

Language: English Document Type: ARTICLE

Abstract: Background: Although cesarean section is known to be associated with higher hospital charges than vaginal delivery, cost comparisons require further investigation. This study compared maternal hospital charges of women with one previous cesarean section undergoing a trial of labor with the charges of women who underwent an elective repeat cesarean section. Hospital charges for the trial of labor group were also compared with charges of women with a previous vaginal delivery but no previous cesarean section. Methods: A retrospective analysis of three primiparous privately **insured** patient groups who gave birth from July 1992 to October 1993 was conducted. Hospital charges for 50 primiparas with previous cesarean births who underwent a trial of labor were compared with those of 50 contemporaneous primiparas who underwent elective repeat cesarean section, and with those of 50 primiparas without a past history of cesarean birth. Results: Trial of labor was associated with a mean maternal hospital charge of \$5820 +/- \$1609



compared with \$6785 +/- \$771 for elective repeat cesarean section (p < 0.001). Trial of labor was also associated with a decreased length of stay when compared with elective cesarean section (2.48 +/- 0.88 days vs 3.62 +/- 0.57 days, p < 0.001). The difference in charges between these two groups was primarily due to charges associated with length of stay and the operating room, but was partly offset by charges associated with labor. The group of women without a past history of cesarean birth had a mean maternal hospital charge of \$4685 +/- \$966 and a mean length of stay of 1.96 +/- 0.63 days. Conclusions: Trial of labor is associated with an overall 14 percent reduction in maternal hospital charges and a 31 percent reduction in length of stay compared with elective repeat cesarean section.

12/3,AB/17 (Item 3 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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03938921 Genuine Article#: QT945 Number of References: 42

Title: MODULATION BY MU-OPIOID AGONISTS OF

GUANOSINE-5'-O-(3-[S-35]THIO)TRIPHOSPHATE BINDING TO MEMBRANES FROM

HUMAN NEUROBLASTOMA SH-SY5Y CELLS (Abstract Available)

Author(s): TRAYNOR JR ; NAHORSKI SR

Corporate Source: LOUGHBOROUGH UNIV TECHNOL, DEPT CHEM, ASHBY RD/LOUGHBOROUGH

LE11 3TU/LEICS/ENGLAND/; UNIV LEICESTER, DEPT CELL PHYSIOL &

PHARMACOL/LEICESTER LE1 9NH/LEICS/ENGLAND/

Journal: MOLECULAR PHARMACOLOGY, 1995, V47, N4 (APR), P848-854

ISSN: 0026-895X

Language: ENGLISH Document Type: ARTICLE

Abstract: The ability of mu-opioid agonists to activate G proteins has been demonstrated by studying the binding of the GTP analogue guanosine-5'-O-(3-[S-35]thio)triphosphate ([S-35]GTP gamma S) to membranes from the human neuroblastoma SH-SY5Y cell line. The potent opioid agonist fentanyl caused an approximate doubling of basal [S-35]GTP gamma S binding in a naloxone-sensitive manner, confirming this to be an opioid receptor-mediated process. The presence of GDP was necessary to observe this effect. Pretreatment of the cells with pertussis toxin (100 ng/ml, for 24 hr) completely prevented the fentanyl-stimulated increase in [S-35]GTP gamma S binding and lowered the basal binding of [S-35]GTP gamma S. These latter data suggest an involvement of G(i) and/or G(o) proteins and their activation by added membrane-bound receptors even in the absence of agonist. The order of potency of a series of opioid agonists in stimulating the binding of [S-35]GTP gamma S was buprenorphine > cyclazocine = levallorphan > nalorphine > [D-Ala(2), MePhe(4), Gly-ol(5)]enkephalin (DAMGO) > fentanyl > morphine > pentazocine. DAMGO, fentanyl, and morphine were full agonists but the remaining compounds showed decreasing levels of intrinsic activity in the order buprenorphine > pentazocine > cyclazocine = nalorphine > levallorphan. The opioid antagonist naloxone was without effect. Under the conditions of the [S-35]GTP gamma S assay, binding of agonists was to a high affinity site, indicating that a high agonist affinity state of the mu-opioid receptor is responsible for the observed stimulation of [S-35]GTP gamma S binding. The level of [S-35]GTP gamma S binding (597 fmol/mg of protein) stimulated by DAMGO was 2-fold greater than the maximal number of mu-opioid agonist binding sites (B-max) determined using [H-3]DAMGO (254 fmol/mg of protein). The opioid agonist-mediated stimulation of [S-35]GTP gamma S binding in SH-SY5Y cell membranes thus provides a 'functional' measure of agonist occupation of mu-opioid receptors and offers a simple method for the determination of efficacy and intrinsic activity of mu-opioid agonists.

12/3,AB/18 (Item 4 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2001 Inst for Sci Info. All rts. reserv.

03509171 Genuine Article#: PH976 Number of References: 13

**Title: SYNTHESIS AND BIOLOGICAL EVALUATION OF 14-ALKOXYMORPHINANS .10.**

**14-O-METHYL DERIVATIVES OF 5-METHYLNALTREXONE AND 5-METHYLNALOXONE (**

**Abstract Available)**

**Author(s): SCHMIDHAMMER H; NUSSBAUMER C; PATEL D; TRAYNOR JR**

**Corporate Source: ASTRA PIAIN RES UNIT, 275 BIS, BLVD ARMAND FRAPPIER, EDIFICE**

**3000/LAVAL H7V 4A7/PQ/CANADA/; INNSBRUCK UNIV, INST PHARMACEUT**

**CHEM/A-6020 INNSBRUCK//AUSTRIA/; LOUGHBOROUGH UNIV TECHNOL, DEPT**

**CHEM/LOUGHBOROUGH LE11 3TU/LEICS/ENGLAND/**

**Journal: HELVETICA CHIMICA ACTA, 1994, V77, N6, P1585-1589**

**ISSN: 0018-019X**

**Language: ENGLISH Document Type: ARTICLE**

**Abstract: In several steps, 5,14-O -dimethylnaltrexone (3) and 5,14-O**

**-dimethylnaloxone (4) were prepared starting from 5,14-O**

**-dimethyloxycodone (5). Compound 3 exhibited opioid agonism in vitro**

**(guinea-pig ileum and mouse vas deferens preparations) and antagonism**

**in vivo (AcOH-writhing test in mice), while compound 4 was found to be**

**an agonist in vitro and in vivo.**

21/3,AB/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

4695387 INSPEC Abstract Number: A9415-2960-013, B9408-7430-019

**Title: A low power 12-bit ADC for nuclear instrumentation**

Author(s): Adachi, R.; Landis, D.; Madden, N.; **Silver, E.** ; LeGros, M.

Author Affiliation: Lawrence Berkeley Lab., CA, USA

p.365-7 vol.1

Publisher: IEEE, New York, NY, USA

Publication Date: 1992 Country of Publication: USA 2 vol. xlix+1362

pp.

ISBN: 0 7803 0884 0

U.S. Copyright Clearance Center Code: 0 7803 0884 0/93/\$3.00

Conference Title: 1992 IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC'92)

Conference Sponsor: IEEE; Argonne Nat. Lab.; Brookhaven Nat. Lab.; United States Dept. Energy; et al

Conference Date: 25-31 Oct. 1992 Conference Location: Orlando, FL, USA

Language: English

Abstract: A low-power, successive-approximation, analog-to-digital converter (ADC) for low-rate, low-cost, battery-powered **applications** is described. The ADC is based on a commercial 50-mW successive-approximation CMOS device (CS5102). An on-chip self-calibration circuit reduces the inherent differential nonlinearity to 7%. A further reduction of the differential nonlinearity to 0.5% is attained with a four-bit Gatti function. The Gatti function is distributed to minimize battery power consumption. All analog functions reside with the ADC, while the noisy digital functions reside in the personal-**computer** -based histogramming memory. Fiber-optic cables carry all digital information between the ADC and this memory.

Subfile: A B

21/3,AB/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02091934 INSPEC Abstract Number: C83031510

**Title: New alternatives for computer-scheduling of multi-product plants running batchwise under constraints**

Author(s): Durand, C.X.P.; **Silver, E.A.**

Author Affiliation: Novatronics Inc., Pompano Beach, FL, USA

Journal: International Journal of Production Research vol.21, no.4

p.499-509

Publication Date: July-Aug. 1983 Country of Publication: UK

CODEN: IJPRB8 ISSN: 0020-7543

Language: English

Abstract: Discusses a new approach used for operations scheduling of multi-product plants. The algorithm allows schedules to be built and improved even when complex sets of constraints are to be dealt with. The 'post-scheduling' technique that was developed uses global functions or 'modules' called in an interactive fashion according to the decisions made by an operator and based on the results obtained at a previous step. The paper also studies the human decisional impact in combinatorial problem-solving and presents a generalization of constraint handling in scheduling systems. Global results deriving from an industrial scheduling problem that was solved using this method are also presented.

Subfile: C

21/3,AB/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00301872 INSPEC Abstract Number: C71020289

**Title: A quantitative rule for the use of resources in a multiprogrammed computer system**

Author(s): **Silver, E.A.** ; Loss, A.L.; Black, F.  
Author Affiliation: Univ. Waterloo, Ont., Canada  
Journal: INFOR. Canadian Journal of Operational Research and Information  
Processing vol.9, no.2 p.96-110  
Publication Date: July 1971 Country of Publication: Canada  
CODEN: INFRCL ISSN: 0315-5986  
Language: English

Abstract: The **computer** has been used extensively to help solve problems in management science, but little has been done in the opposite direction. This paper describes an **application** of quantitative techniques to improve the throughput of a **computer** system. One of the trends in large-scale **computer** operations is towards multiprogrammed systems. Here the adjective multiprogrammed is meant to imply that two or more jobs simultaneously occupy the main memory of the **computer** and share resources such as the central **processor**, machine operators, and input/output devices. Under such a parallel configuration, any hardware and/or **software** change that is geared to speed up the completion of a particular job may have over-compensating detrimental effects on the other jobs that reside in parallel with the one under consideration. In this paper, a quantitative rule is developed, based on the criterion of maximising total throughput of jobs, to decide whether or not a proposed change is desirable. Careful consideration is given to how the system parameters and individual program parameters required in the rule would be estimated.

Subfile: C

21/3,AB/4 (Item 1 from file: 108)  
DIALOG(R) File 108:AEROSPACE DATABASE  
(c) 2001 AIAA. All rts. reserv.

00799576 A76-42095

**The structure and operation of a long-range energy simulation model**

WHITTLE, C. E.; REISTER, D. B.; SILVER, E. G. (Institute for Energy Analysis, Oak Ridge, Tenn.); WEINHOLD, J. F. (ERDA, Washington, D.C.)

In: Summer Computer Simulation Conference, San Francisco, Calif., July 21-23, 1975, Proceedings. Volume 2. (A76-42076 21-59) Montvale, N.J., AFIPS Press, 1975, p. 1245-1256.

1975 16 REFS.

A model is proposed for simulation of plausible U.S. energy supplies and demands for the last part of the 20th century and the first part of the 21st century. Demand functions are generated for each of the energy carriers - electricity, liquids, gases, and solids - through examination of the industrial, the residential and commercial, and the transportation demand sectors in terms of their component activities. Supply functions are generated independently for each of the energy carriers based on the best available data and estimates for the fossil fuels, uranium, hydroelectricity, geothermal heat, and solar energy, and on present knowledge and projections about extraction and conversion technology. A **computer** program for combining the independently generated supply and demand functions is developed, and the combined results are displayed in tabular and graphic form. An iterative matching **process** is discussed along with the limitations of the model. (S.D.)

21/3,AB/5 (Item 1 from file: 8)  
DIALOG(R) File 8:Ei Compendex(R)  
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03302812

E.I. Monthly No: EIM9109-044094

Title: **Predicted performance of the lithium scattering and graphite crystal polarimeter for the SPECTRUM-X-Gamma mission.**

Author: Weisskopf, M. C.; Elsner, R. F.; Novick, R.; Kaaret, P.; **Silver, E.**

Corporate Source: NASA Marshall Space Flight Cent, USA

Conference Title: X-Ray/EUV Optics for Astronomy, Microscopy, Polarimetry, and Projection Lithography

Conference Location: San Diego, CA, USA Conference Date: 19900709

E.I. Conference No.: 14604

Source: Proceedings of SPIE - The International Society for Optical Engineering v 1343. Publ by Int Soc for Optical Engineering, Bellingham, WA, USA. p 457-468

Publication Year: 1991

CODEN: PSISDG ISSN: 0277-786X

Language: English

Abstract: X-ray scattering from a lithium disc and Bragg reflection from a mosaic graphite crystal can be exploited to measure the linear polarization of radiation emitted from cosmic x-ray sources. The sensitivity is greatly enhanced if these polarimeters are placed at the focus of an x-ray telescope. Such devices form two of the three components of the Stellar X-Ray Polarimeter experiment scheduled to fly on the SPECTRUM-X-Gamma mission. The experiment will reside at the focus of one of the SODART x-ray telescopes. We describe the expected on-axis performance of these two components of the Stellar X-Ray Polarimeter experiment based on detailed Monte-Carlo simulations. We also discuss various systematic effects, both external and internal to the experiment, that must be considered in order to properly design and utilize the experiment. (Author abstract) 16 Refs.

21/3,AB/6 (Item 2 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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00822246

E.I. Monthly No: EI7906044988

E.I. Yearly No: EI79061020

**Title: ADVANCES IN REACTOR PHYSICS, 1978.**

Author: Silver, E. G. (Ed. )

Corporate Source: Oak Ridge Natl Lab, Tenn

Source: Proc of ANS Top Meet on Adv in React Phys, Pap Gatlinburg, Tenn, Apr 10-12 1978 Sponsored by ANS, React Phys Div, Hinsdale, Ill, 1978. Available from NTIS (CONF-780401), Springfield, Va, 1978 563 p

Publication Year: 1978

Language: ENGLISH

Abstract: This conference contains 47 papers, all of which are abstracted separately. The main subjects under discussion are concerned with the design, operation and maintenance of nuclear reactors and their cores. Also, **computer** programming techniques applicable to systems of control involved.

21/3,AB/7 (Item 1 from file: 103)

DIALOG(R)File 103:Energy SciTec

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03492136 EDB-93-071012; INS-93-010340

**Title: Twenty-first DOE/NRC nuclear air-cleaning conference**

Author(s): Bellamy, R.R.; Moeller, D.W.; First, M.W. (Cambridge, MA (United States))

**Title: Nuclear Safety**

Author(s)/Editor(s): Silver, E.G. (ed.)

Corporate Source: Oak Ridge National Lab., TN (United States)

Publication Date: 1991 p 80-91 (170 p)

Report Number(s): TPJ-NS-32-No.1

Language: English

Abstract: The Twenty-First Department of Energy/Nuclear Regulatory Commission Nuclear Air-Cleaning Conference was held Aug. 12-16, 1990, in San Diego, Calif. A total of 232 air-cleaning specialists attended the conference. The United States and 14 foreign countries were represented, and the specialists were affiliated with government agencies, educational institutions, and the nuclear industry. Several major topics were discussed during the conference, including development and use of industry codes and standards: chemical **processing** off-gas cleaning; particulate filter developments, including filter testing and filter response to physical stress;

development of absorbents, including laboratory testing and in-place testing; incineration and vitrification; containment venting; reactor operations, including design and modeling; and measurement systems capable of verifying safe operation. The conference continued to provide a forum for direct and efficient interchange of technical and philosophical information among the participants. The high level of foreign participation and interest continues, as evidenced by over one-half of the papers being sponsored by foreign interests, and one quarter of the attendees being from outside the United States. Further evidence of international interest was seen in a plenary session devoted to nuclear air-cleaning programs in nine different countries. A common concern throughout many of the sessions was the development of meaningful standards, their implementation for existing air-cleaning systems, and the use of these standards by regulatory agencies.

**21/3,AB/8 (Item 2 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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03479455 EDB-93-058331

**Title: General administrative activities**

Author(s): Muhlheim, M.D.; Silver, E.G.

Source: Nuclear Safety (United States) v 32:4. Coden: NUSAAZ ISSN: 0029-5604

Publication Date: Oct-Dec 1991 p 596-609

Language: English

Abstract: General Administrative Activities' summarizes selected current topics that are related to nuclear safety but do not fit elsewhere in the journal. Included in this issue are items reported during April, May, and June 1991. Subjects discussed, among others, are the current status on power-plant license renewal, operator requalification exams, and Part 52 design certification. 12 refs.

**21/3,AB/9 (Item 3 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

02752417 EDB-89-143454

**Title: Nuclear Safety**

Author(s)/Editor(s): Silver, E.G. (ed.)

Corporate Source: Oak Ridge National Lab., TN (USA)

Sponsoring Organization: DOE/EH

Publication Date: 1989 (159 p)

Report Number(s): TPR-NS-30-3

Language: In English

Abstract: This document is a review journal that covers significant developments in the field of nuclear safety. Its scope includes the analysis and control of hazards associated with nuclear energy, operations involving fissionable materials, and the products of nuclear fission and their effects on the environment. Primary emphasis is on safety in reactor design, construction, and operation; however, the safety aspects of the entire fuel cycle, including fuel fabrication, spent-fuel processing, nuclear waste disposal, handling of radioisotopes, and environmental effects of these operations, are also treated.

**21/3,AB/10 (Item 4 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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00414523 ERA-03-052488; INS-78-016097; EDB-78-113704

**Title: Design analysis using coupled neutronic and thermal-hydraulic models**

Author(s): Wagner, S.G.; Rohan, P.E.; Youngblood, J.J.; Silver, E.G. (ed.)

Affiliation: Combustion Engineering, Inc., Windsor, CT

**Title: Advances in reactor physics** (PWR)  
Corporate Source: Oak Ridge National Lab., TN (USA)  
Conference Title: Topical meeting on advances in reactor physics  
Conference Location: Gatlinburg, TN, USA Conference Date: 9 Apr 1978  
Publication Date: Jun 1978 p 319-327  
Report Number(s): CONF-780401-  
Language: English

**Abstract:** Major new features including an open channel flow model and a depletion capability have been added to Combustion Engineering's HERMITE space-time kinetics **computer** code. HERMITE is being used to analyze a variety of design transients. As an example, **application** of the new capabilities to core conditions during a PWR steam line break accident at the end of a fuel cycle is examined. Open and closed channel results are compared and significant feedback effects between the open channel flow model and the neutronics model are noted. The effects of inlet temperature distribution, decay heat, and inlet flow distribution boundary conditions on reactivity, power distribution and flow distribution are described.

**21/3,AB/11 (Item 5 from file: 103)**  
DIALOG(R)File 103:Energy SciTec  
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00115657 ERA-01-019452; EPA-; EDB-76-052927

**Title: Energy use and economic growth**  
Author(s): **Silver, E.G.**  
Affiliation: Oak Ridge Associated Universities, TN  
**Title: Energy sources for the future**  
Conference Title: Energy sources of the future meeting  
Conference Location: Oak Ridge, TN, USA Conference Date: 7 Jul 1975  
Publication Date: 1975 p 247-259  
Report Number(s): CONF-750733-  
Language: English

**Abstract:** The direct value of energy in the overall economy represents only a small percentage of the total GNP, but it is so closely interwoven to the economic activity that curtailment of its availability or unusual increases in its price may well have serious effects on economic health. Despite the fact that, in recent history, the growth rates of energy and the economy have been parallel, consideration of other economies and studies of the details of the interaction between the use of energy and specific economic activities suggest that the growth of energy use can be reduced by eliminating waste and substituting more-efficient **processes** for some of those now in use; and that such actions will not necessarily entail economic stagnation or reductions in standards of living. Of concern is the availability of the capital required for many of the energy conservation proposals. With the implementation of many such projects in a short time, interest rates may go up to a point where profits are reduced or destroyed. Several **computer** models that try to predict the amount of energy use reduction that may be achievable and what their effect on the economy is likely to be are examined and compared. (MCW)

**21/3,AB/12 (Item 1 from file: 6)**  
DIALOG(R)File 6:NTIS  
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1139640 NTIS Accession Number: NUREG/CR-4011

**21/55 Data Base User's Manual**  
(Technical rept)

**Silver, E. G.**  
Oak Ridge National Lab., TN.  
Corp. Source Codes: 021310000  
Sponsor: Nuclear Regulatory Commission, Washington, DC.  
Report No.: ORNL/NSIC-221  
Sep 84 317p  
Languages: English

Journal Announcement: GRAI8426

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NTIS Prices: PC A14/MF A01

The Nuclear Regulatory Commission's Office for the Analysis and Evaluation of Operational Data has developed, through the Nuclear Operations Analysis Center (NOAC) at Oak Ridge National Laboratory (ORNL), a data base for storing and organizing information obtained from the reports on construction deficiencies (CDRs) submitted to NRC under the requirements of 10 CFR 21 and 10 CFR 50.55(e) by holders of construction permits for nuclear facilities. The **computerized** data base stores coded and textual information about the reports issued and the events to which they refer, including such data as dates of events and reports, affected systems and components, source of information, manufacturers and vendors of affected components and the like. The document includes a tutorial guide for novice users of the data base. A system of access control to assure the integrity of the NRC-input data was developed and is described.



30/3,AB/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

6743524 INSPEC Abstract Number: C2000-12-6130B-027

**Title: Improving visualization interactivity in Java**

Author(s): **Weaver, C.E.** ; Livny, M.

Author Affiliation: Dept. of Comput. Sci., Wisconsin Univ., Madison, WI, USA

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)

vol.3960 p.62-72

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 2000 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(2000)3960L:62:IVIJ;1-O

Material Identity Number: C574-2000-089

U.S. Copyright Clearance Center Code: 0277-786X/2000/\$15.00

Conference Title: Visual Data Exploration and Analysis VII

Conference Sponsor: SPIE; IS&T

Conference Date: 24-26 Jan. 2000 Conference Location: San Jose, CA, USA

Language: English

Abstract: An ongoing challenge for visualization researchers is to create tightly coupled dynamic query interfaces that respond quickly and smoothly to user interaction, regardless of the amount of data or the complexity of the display. Our solution is to follow a simple philosophy: during user activity, maintain the quality of visual context at the expense of visual content by reducing the impact of expensive visualization operations on interactivity. Our interactive visualization strategy splits finite computational resources by giving the user interface whatever resources it needs to maintain interactivity, and giving the data system whatever remains; user interface optimizations increase resources left for the data system, and data system optimizations make the best use of leftover resources. The authors describe three techniques that implement this strategy. First, they use a family of techniques called throttling to moderate the execution of queries and renders. Second, they improve refresh speed by eliminating several unnecessary, graphically-intensive operations. Third, they preprocess and render data into bitmaps using an asynchronous imaging engine. Using these techniques, the authors have increased the speed and smoothness of interface navigation in their visualization framework even during expensive query and render operations.

Subfile: C

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30/3,AB/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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03382637 INSPEC Abstract Number: B89040591, C89039769

**Title: Signal processors give navy an edge in ASW**

Author(s): Cochran, J.A.; **Weaver, C.A., Jr.**

Author Affiliation: AT&T Bell Labs., Murrayhill, NJ, USA

Journal: Defense Electronics vol.21, no.3 p.79, 84, 84, 87

Publication Date: March 1989 Country of Publication: USA

CODEN: DEELDH ISSN: 0194-7885

Language: English

Abstract: Describes the enhanced modular signal processor (EMSP), also known as the AN/UYS 2. The EMSP embodies a number of advances in computer architecture and design, including signal and data processing abilities. The EMSP uses a coarse-grain data flow architecture that provides the advantages of parallel processing and an asynchronous dynamic operating system. It is modular and can be sized up to supercomputer performance levels. It is produced in two versions. The standard SEM B format cards are for surface ships and submarines. The SEM E is used for aviation applications .

Subfile: B C

30/3,AB/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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02543973 INSPEC Abstract Number: C85050930

**Title: Compact design of a program manager's decision support system**

Author(s): Buede, D.M.; Yates, G.; Weaver, C.A.

Author Affiliation: Decision Logistics Inc., Reston, VA, USA

Journal: IEEE Transactions on Systems, Man and Cybernetics vol.SMC-15,  
no.4 p.457-68

Publication Date: July-Aug. 1985 Country of Publication: USA

CODEN: ISYMAW ISSN: 0018-9472

U.S. Copyright Clearance Center Code: 0018-9472/85/0700-0457\$01.00

Language: English

Abstract: The systematic design of a decision support system should proceed through the following four analyses: life cycle analysis; capabilities allocation to planned future iterations; architectural choice; and hardware/ **software** analysis. The **application** of such a design **process** to a program manager's support system for the Defense Systems Management College is presented. The result of this design **process** was a recommendation for iterative (four planned iterations) development of a microcomputer network that hosted an increasingly complete and complex set of analytical tools. These tools would support the cause-and-effect examination of issues required to manage cost, schedule, and performance factors associated with the acquisition and development of major Department of Defense systems.

Subfile: C

30/3,AB/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

02287783 INSPEC Abstract Number: C84035590

**Title: Nursing participation in computer vendor selection**

Author(s): Weaver, C.G. ; Johnson, J.E.

Author Affiliation: Washington Hospital Center, Washington, DC, USA

Conference Title: Proceedings of the Seventh Annual Symposium on Computer Applications in Medical Care p.472-4

Editor(s): Dayhoff, R.E.

Publisher: IEEE Comput. Soc. Press, Silver Spring, MD, USA

Publication Date: 1984 Country of Publication: USA xxx+989 pp.

ISBN: 0 8186 0503 0

U.S. Copyright Clearance Center Code: 0195-4210/83/0000-0472\$01.00

Conference Sponsor: IEEE

Conference Date: 23-26 Oct. 1983 Conference Location: Washington, DC, USA

Language: English

Abstract: It is argued that nursing, because of its pivotal position within the hospital structure, should assume a leadership role in decision-making phases of automation, including participation in the selection of the **computer** vendor. Experiences at the authors' hospital illustrate this point.

Subfile: C

30/3,AB/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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01497677 INSPEC Abstract Number: A80041298, B80021325, C80013582

**Title: A study of noninvasive blood pressure measurement techniques**

Author(s): Weaver, C.S. ; Eckerley, J.S.; Newgard, P.M.; Warnke, C.T.; Angell, J.B.; Terry, S.C.; Robinson, J.

Author Affiliation: SRI Internat., Menlo Park, CA, USA

Conference Title: Noninvasive Cardiovascular Measurements p.89-105

Editor(s): Miller, H.A.; Schmidt, E.V.; Harrison, D.C.

Publisher: Soc. Photo-Optical Instrumentation Engrs, Bellingham, WA, USA

Publication Date: 1978 Country of Publication: USA viii+225 pp.

ISBN: 0 89252 195 3

Conference Sponsor: Nat. Aeronautics & Space Administration: et al

Conference Date: Sept. 1978 Conference Location: Stanford, CA, USA

Language: English

Abstract: Some results of a study of techniques for the noninvasive and ambulatory measurement of blood pressure are presented. A method for **computer processing** ambulatory or stress test data to determine blood pressure is described. It appears that good accuracies can be obtained with ambulatory patients during normal ranges of physical activities and perhaps during treadmill tests. The development and testing of a new transducer for the noninvasive beat-by-beat measurement of blood pressure is described. The transducer outputs are similar to intra-arterial waveforms that are obtained by catheter, and it is expected that the transducer will be used in the operating room, the ICU, and the CCU.

Subfile: A B C

30/3,AB/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

01147417 INSPEC Abstract Number: C78004279

**Title: Simulation and sewage**

Author(s): Mellichamp, J.M.; Weaver, C.P.

Author Affiliation: Univ. of Alabama, Huntsville, AL, USA

Journal: Decision Sciences vol.8, no.3 p.584-97

Publication Date: July 1977 Country of Publication: USA

CODEN: DESCDQ ISSN: 0011-7315

Language: English

Abstract: Faced with increasing pressure on environmental issues, municipal and industrial planners must incorporate changing technology into planning **processes**. Conventional approaches to wastewater treatment plant design severely limit the ability of the designer to evaluate alternative design configurations. This paper suggests that **computer** simulation techniques can provide solutions to many of the problems which confront a designer. A simulation model of a hypothetical sewage treatment plant is described, and some of the design trace-offs that can be evaluated with the model are presented.

Subfile: C

30/3,AB/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00408994 INSPEC Abstract Number: C72016056

**Title: The computer monitoring of surgical patients**

Author(s): Weaver, C.S. ; Snider, D.E.; Bellville, J.W.; Franklin, G.F.

Author Affiliation: Stanford Univ., CA, USA

Conference Title: Proceedings of the 24th annual conference on engineering in medicine and biology, 1972 p.338

Publisher: Alliance for Engng. in Medicine and Biology, Washington, DC, USA

Publication Date: 1971 Country of Publication: USA xix+387 pp.

Conference Sponsor: alliance for Engng in Medicine and Biology

Conference Date: 31 Oct.-4 Nov. 1971 Conference Location: Las Vegas, NV, USA

Language: English

Abstract: The authors' aims are the development and evaluation of a **computer** -monitoring system that can safely enable remote management of anesthesia during surgery. If these aims are realized, a highly skilled anesthesiologist could simultaneously supervise several operations where the anesthetic was administered by personnel with less training. Other objectives include the development of instrumentation and **computer processing** techniques to improve the information available to the

anesthesiologist, both in the operating room and at a remote monitoring location.

Subfile: C

30/3,AB/8 (Item 8 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2001 Institution of Electrical Engineers. All rts. reserv.

00175706 INSPEC Abstract Number: B70032304

**Title: Optical data processing with application to radar parameter estimation**

Author(s): **Weaver, C.S.** ; Ramsey, S.D.; Goodman, J.W.; Rosie, A.; Silvestri, A.

Issued by: Electronics Labs., Stanford Univ., CA, USA

Publication Date: June 1969 Country of Publication: USA 88 pp.

Report Number: TR-2306-2 Contract Number: AF33(615)-3589

Language: English

**Abstract:** The ease with which an optical system can achieve an extremely large time-band-width product makes optical filters and autocorrelation function generators attractive for signal detection and parameter estimation when signal-to-noise ratios are very low. The theory of autocorrelation function generation is given, and the principles of a new optical filter that overcomes the severe positioning requirements of conventional optical filters are described. The relationship between the signal amplitude and matched-filter impulse response amplitude is discussed, and a method for reducing a noise component that is common to all optical filters is given. A matched filter was constructed and used to detect a radarlike pulse when the signal-to-noise ratio was -40 dB. A digital **computer**, used with an optical system, to filter time signals was found to be as accurate as an all-digital system, but a significant reduction in computation time was realized. The theory of an optical-digital filter is presented; also, the theory of distortions caused by 'nonlinearities' in optical filters and autocorrelation function generators is developed in an appendix. A radar pulse parameter estimator that uses an autocorrelator and another that uses a bank of matched filters are proposed. Both estimators may be realized with optical techniques.

Subfile: B

30/3,AB/9 (Item 1 from file: 108)  
DIALOG(R)File 108:AEROSPACE DATABASE  
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02427358 A99-38606

**Toward a parameterization of mesoscale fluxes and moist convection induced by landscape heterogeneity**

Liu, Yongqiang; Weaver, Christopher P.; Avissar, Roni (Rutgers Univ., New Brunswick, NJ)

Journal of Geophysical Research (ISSN 0148-0227), vol. 104, no. D16, Aug. 27, 1999, p. 19,515-19,533.

Aug. 35 REFS.

We develop a parameterization for landscape-forced fluxes, similar to what might eventually be implemented in a GCM. In addition, we investigate the relationship between the parameterized mesoscale flux and the convective condensation associated with these circulations as a first step toward directly including clouds and precipitation forced by surface heterogeneity effects as one component of a comprehensive GCM convective scheme. To generate the data necessary for this development, we perform a number of simulations with a state-of-the-art mesoscale model to determine the sensitivity of the fluxes and condensation to a variety of background atmospheric conditions and land-surface wetness distributions. We use similarity theory to determine the dependence of the mesoscale sensible heat and moisture fluxes on the parameters relevant to the problem, and we create parameterized vertical flux profiles by fitting with Chebyshev polynomials. The parameterized fluxes are tested against an independent, three-dimensional (3D) simulation of mesoscale development over a heterogeneous landscape, and general good agreement is found. We propose an

empirical form for domain-averaged condensation on the basis of a linear relationship with parameterized mesoscale moisture flux and also demonstrate a reasonable agreement with the results from the 3D simulation.

The methodology of this study, i.e., the use of a numerical model in the preliminary stages of parameterization development, is advantageous for situations where the necessary observational data set is nonexistent. The use of model simulations to fully explore the parameter space of this type of problem should then lead to observational campaigns that focus on only those key **processes** and variables which are relevant for the further refinement of a given parameterization. (Author)

30/3,AB/10 (Item 2 from file: 108)

DIALOG(R)File 108:AEROSPACE DATABASE

(c) 2001 AIAA. All rts. reserv.

01317388 N81-24995

**Thermal and thermomechanical data from in situ heater experiments at Stripa, Sweden** (radioactive waste storage in crystalline rock)

CHAN, T.; BINNAL, E.; NELSON, P.; STOLZMAN, R.; WAN, O.; WEAVER, C.; ANG, K.; BRALEY, J.; MCEVOY, M.

California Univ., Berkeley. Lawrence Berkeley Lab. Earth Sciences Div.

CORPORATE CODE: CC787610

Sep. 1980 242P.

REPORT NO.: LBL-11477; TIF-29

CONTRACT NO.: W-7405-ENG-48

Heater experiments, conducted in a granite body adjacent to a recently abandoned iron ore mine at Stripa, Sweden, to investigate the response of a hard rock mass to thermal loading, lasted for approximately one year. The rock was heavily instrumented to measure the temperature, displacement, and stress fields. Monitoring of the rock response continued for half a year after the heaters were deactivated. The enormous data base (approximately 50 million measurements), recorded by a **computer**-based data acquisition system, was structured, verified, and converted to engineering units. The types of data available and the procedures used for data acquisition, and transfer, encoding-decoding, reorganization, storage, **processing**, and verification are described. Information is given on data structure and format and how potential users can access the **computer**-readable data. (DOE)

30/3,AB/11 (Item 3 from file: 108)

DIALOG(R)File 108:AEROSPACE DATABASE

(c) 2001 AIAA. All rts. reserv.

00444376 A71-22459

**Techniques in clinical physiology- A survey of measurements in anesthesiology** (Book on clinical physiology techniques and anesthesiology measurements covering electronics, ECG analysis, blood pressure measurement, cardiac function, respiratory mechanics, etc)

BELLVILLE, J. W.; WEAVER, C. S.

PLACE OF PUBLICATION: LONDON PUBLISHER: COLLIER-MACMILLAN, LTD. 1969

542P. 607 REFS.

30/3,AB/12 (Item 4 from file: 108)

DIALOG(R)File 108:AEROSPACE DATABASE

(c) 2001 AIAA. All rts. reserv.

00434909 A71-12992

**Digital filtration and processing of electrocardiograms** (Digital filtration and **processing** of electrocardiograms on **computers** using linear difference equations)

/Tsifrovaia fil'tratsiia i obrabotka elektrokardiogramm/

FITZGERALD, J. W.; TOOLE, J. G.; VON DER GROEBEN, J.; WEAVER, C. S.

PLACE OF PUBLICATION: MOSCOW PUBLISHER: IZDATEL'STVO NAUKA 1970

34P. 10 REFS.

PRESENTATION NOTE: IN- BIOELECTRIC CONTROL. MAN AND AUTOMATIC SYSTEMS,

INTERNATIONAL SYMPOSIUM ON TECHNICAL AND BIOLOGICAL CONTROL PROBLEMS, YEREVAN, ARMENIAN SSR, SEP. 24-28, 1968, TRANSACTIONS /BIOELEKTRICHESKOE UPRAVLENIE. CHELOVEK I AVTOMATICHESKIE SISTEMY, MEZHDUNARODNYI SIMPOZIUM PO TEKHNICHESKIM I BIOLOGICHESKIM PROBLEMAM UPRAVLENIIA, YEREVAN, ARMENIAN SSR, SEP. 24-28, 1968, TRUDY/. P. 346- 379. /A71-12976 03-05/

**30/3,AB/13 (Item 5 from file: 108)**

DIALOG(R)File 108:AEROSPACE DATABASE

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00393941 N69-39777

**The automatic classification of modulation types by pattern recognition**  
**Technical report, Feb. 1968 - Dec. 1968** (Pattern recognition techniques for automatic modulation type classification of high frequency radio signal )

COLE, C. A.; KRUMLAND, R. B.; MILLER, M. L.; WEAVER, C. S.

Stanford Univ., CA. ELECTRONICS LABS.

CORPORATE CODE: S0380476

Apr. 1969 31P.

REPORT NO.: AD-691069; SU-SEL-69-006; TR-1829-2

CONTRACT NO.: AF 33/615/-3589

**30/3,AB/14 (Item 1 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

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02808420

E.I. Monthly No: EIM8910-037640

**Title: Noninvasive stress test measurement that indicates the presence of CAD.**

Author: **Weaver, C. S.** ; Chittenden, C. T.; Fry, G. A.; Brown, W. W.

Corporate Source: SRI Int, CA, USA

Conference Title: Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society

Conference Location: New Orleans, LA, USA Conference Date: 19881104

E.I. Conference No.: 12252

Source: IEEE/Engineering in Medicine and Biology Society Annual Conference Part 1 (of 4). Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. Available from IEEE Service Cent (cat n 88CH2566-8), Piscataway, NJ, USA. p 80-81

Publication Year: 1988

CODEN: IMBPDN

Language: English

Abstract: A novel technology has been developed that allows blood pressure to be more accurately measured during heavy exercise. While using **computer** algorithms to eliminate artifact from Korotkov sounds a systolic interval, the time from ECG (electrocardiogram) R-wave peak to the Korotkov sound onset (the RK-interval), is measured for each heart beat. When plotted against cuff pressure, the RK-interval follows a slowly varying curve. A linear regression line fitted to this curve approximates the reciprocal of the systolic slope of the pressure pulse in the brachial artery, which is correlated with dp/dt in the left ventricle. The regression line slopes were measured during treadmill stress tests at the Palo Alto Medical Clinic, and curves of slope versus heart rate were plotted for each treadmilltest. A set of shape descriptors for these curves has been developed and statistically analyzed. Patients with coronary artery disease were discriminated from healthy patients with an accuracy rate of approximately 80%. 1 ref.

**30/3,AB/15 (Item 2 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

(c) 2001 Engineering Info. Inc. All rts. reserv.

01940020

E.I. Monthly No: EI8601004461

E.I. Yearly No: EI86069320

**Title: CONCEPT DESIGN OF A PROGRAM MANAGER'S DECISION SUPPORT SYSTEM.**

Author: BUEDE, DENNIS M.; YATES, GERALD; **WEAVER, CARL A.**

Corporate Source: DECISION LOGISTICS INC, RESTON, VA, USA

Source: IEEE TRANS SYST MAN CYBERN V SMC-15 N 4 1985 P 457-468

Publication Year: 1985

CODEN: ISYMAW ISSN: 0018-9472

Language: ENGLISH

Abstract: THE SYSTEMATIC DESIGN OF A DECISION SUPPORT SYSTEM SHOULD PROCEED THROUGH THE FOLLOWING FOUR ANALYSES: LIFE CYCLE ANALYSIS; CAPABILITIES ALLOCATION TO PLANNED FUTURE ITERATIONS; ARCHITECTURAL CHOICE; AND HARDWARE/**SOFTWARE** ANALYSIS. THE **APPLICATION** OF SUCH A DESIGN **PROCESS** TO A PROGRAM MANAGER'S SUPPORT SYSTEM FOR THE DEFENSE SYSTEMS MANAGEMENT COLLEGE IS PRESENTED HERE. THE RESULT OF THIS DESIGN **PROCESS** WAS A RECOMMENDATION FOR ITERATIVE (FOUR PLANNED ITERATIONS) DEVELOPMENT OF A MICROCOMPUTER NETWORK THAT HOSTED AN INCREASINGLY COMPLETE AND COMPLEX SET OF ANALYTICAL TOOLS. THESE TOOLS WOULD SUPPORT THE CAUSE-AND-EFFECT EXAMINATION OF ISSUES REQUIRED TO MANAGE COST, SCHEDULE, AND PERFORMANCE FACTORS ASSOCIATED WITH THE ACQUISITION AND DEVELOPMENT OF MAJOR DEPARTMENT OF DEFENSE SYSTEMS. 8 REFS.

30/3,AB/16 (Item 1 from file: 35)

DIALOG(R)File 35:Dissertation Abstracts Online

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935278 AAD8627527

**COMPUTER-CURRICULAR TOPICS IN PROGRAMS OF EDUCATIONAL ADMINISTRATION AT SELECTED INSTITUTIONS OF HIGHER EDUCATION IN THE COMMONWEALTH OF PENNSYLVANIA**

Author: **WEAVER, CATHERINE MARGARET**

Degree: ED.D.

Year: 1986

Corporate Source/Institution: TEMPLE UNIVERSITY (0225)

Source: VOLUME 47/08-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 2844. 179 PAGES

Microcomputer companies have contributed greatly to the expanded services and burgeoning number of schools making use of the technology through grants in both funds and equipment. This increased availability of microcomputers has added a new dimension to the management and instructional tasks of educational administrators.

Some of the key functions of administrators include organizing, managing change, and making decisions about management purposes and procedures. Modern **computers** can assist principals and superintendents by coordinating repetitive information, problem solving, and text **processing**. Thus, educational administrators need to learn **computer** knowledge and skills in order to exercise leadership.

The purpose of this research was to answer the question: Given the skills and background **computer** knowledge needed by administrators and indicated by Estes and Watkins; and given the importance of a professor of educational administration's role in preparing future administrators, to what degree are **computer** topics actually being included in preparation courses in higher education?

A survey instrument was developed to determine an answer at institutions of higher education in the Commonwealth of Pennsylvania. Topics were included which could help administrators become efficient managers. Interviews were conducted with department chairpersons or program heads at one-third of the institutions contacted by means of the written survey. These institutions were selected by means of a random sample and contacted six months after the results of the written survey were collated.

Data accruing from the written survey and interviews indicated that three-fourths of the departments included a basic understanding of **computer** types and vocabulary. Topics dealing with security and maintenance were not. Simulated planning, electronic mail, and preprogrammed decision making were being discussed for inclusion in three to five years. Only one department required a course with **computer** topics for administrators. Courses with **computer** topics were optional at all

other institutions.

Recommendations were offered as a result of the study to department or program heads seeking to develop new courses with **computer** topics for administrators.

**30/3,AB/17 (Item 1 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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03753703 EDB-94-169669

**Title: Three dimensional model calculations of the global dispersion of high speed aircraft exhaust and implications for stratospheric ozone loss**

Author(s): Douglass, A.R.; Rood, R.B.; Jackman, C.H.; Weaver, C.J.

**Title: Ozone in the Troposphere and Stratosphere, part 1**

Author(s)/Editor(s): Hudson, R.D.

Corporate Source: National Aeronautics and Space Administration, Greenbelt, MD (United States). Goddard Space Flight Center

Conference Title: 1992 quadrennial ozone symposium

Conference Location: Charlottesville, VA (United States)

Conference Date: 4-13 Jun 1992

Publication Date: Apr 1994 p 281-284 ([10] p)

Report Number(s): N-95-10590 NASA-CP--3266-PT-1; REPT--94B00062-PT-1; NAS--1.55:3266-PT-1; CONF-9206262--

Language: English

**Abstract:** Two-dimensional (zonally averaged) photochemical models are commonly used for calculations of ozone changes due to various perturbations. These include calculating the ozone change expected as a result of change in the lower stratospheric composition due to the exhaust of a fleet of supersonic aircraft flying in the lower stratosphere. However, zonal asymmetries are anticipated to be important to this sort of calculation. The aircraft are expected to be restricted from flying over land at supersonic speed due to sonic booms, thus the pollutant source will not be zonally symmetric. There is loss of pollutant through stratosphere/troposphere exchange, but these **processes** are spatially and temporally inhomogeneous. Asymmetry in the pollutant distribution contributes to the uncertainty in the ozone changes calculated with two dimensional models. Pollutant distributions for integrations of at least 1 year of continuous pollutant emissions along flight corridors are calculated using a three dimensional chemistry and transport model. These distributions indicate the importance of asymmetry in the pollutant distributions to evaluation of the impact of stratospheric aircraft on ozone. The implications of such pollutant asymmetries to assessment calculations are discussed, considering both homogeneous and heterogeneous reactions.

**30/3,AB/18 (Item 2 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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03598954 EDB-94-014920

**Title: Thermodynamic balance of three-dimensional stratospheric winds derived from a data assimilation procedure**

Author(s): Weaver, C.J. (Applied Research Corp., Landover, MD (United States)); Douglass, A.R.; Rood, R.B. (NASA/Goddard Space Flight Center, Greenbelt, MD (United States)

Source: Journal of the Atmospheric Sciences (United States) v 50:17.

Coden: JAHSAK ISSN: 0022-4928

Publication Date: 1 Sep 1993 p 2987-2993

Language: English

**Abstract:** The NASA/Goddard three-dimensional chemistry and transport model is driven by winds from a stratospheric data assimilation system. Synoptic- and planetary-scale patterns, apparent in satellite observations of trace constituents, are successfully reproduced for



seasonal integrations. As model integrations proceed, however, the quality of simulations decrease, and systematic differences between calculation and measurement appear. The differences are explained by examining the zonal-mean residual circulation. The vertical residual velocity [ $\bar{w}$ ]\* is calculated two ways: (i) from the diabatic heating rates and temperature tendency and (ii) from the Eulerian vertical velocity and the horizontal eddy heat flux convergence. The results from these calculations differ substantially. Periodic insertion of observational data during the assimilation **process** continually shocks the general circulation model and produces these differences, which leads to an overestimate of the mean vertical heat and constituent transport. Such differences are expected to be general to all data assimilation products. This interpretation is corroborated by two-dimensional (2D) model calculations. When [ $\bar{w}$ ]\* is calculated from (ii), the 2D ozone evolution is unrealistic and qualitatively similar to the 3D model simulation. The 2D ozone evolution is reasonable when [ $\bar{w}$ ]\* is calculated from (i). 23 refs., 6 figs.

**30/3,AB/19 (Item 3 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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02858315 NOV-90-008656; EDB-90-075553

**Title: Utilization of an on-line process mass spectrometer to improve ethylene yields**

Author(s): **Weaver, C.** ; Cessna, G. (Extrel Corp., Pittsburgh, PA (USA

**Title: Pittsburgh conference 1989 and exposition on analytical chemistry and applied spectroscopy (Abstracts)**

Conference Title: 40. Pittsburgh conference and exposition on analytical chemistry and applied spectroscopy

Conference Location: Atlanta, GA (USA) Conference Date: 6-10 Mar 1989

Publisher: Pittsburgh, PA (USA) Pittsburgh Conference

Publication Date: 1989 p 1-1 (vp.)

Report Number(s): CONF-890331--

Language: In English

Abstract: Due to the significant cost in materials and energy requirements, substantial savings can result from a properly designed closed loop control strategy that utilizes feedback from on-line analyzers. The authors present data supporting improved ethylene yields using an on-line **process** mass spectrometer as a critical component for the optimization of ethylene furnaces. A quadrupole mass spectrometer evaluated on-line in cooperation with a major ethylene producer focussed on the effects of a reduction in feedback cycles and furnace performance.

**30/3,AB/20 (Item 4 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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02343775 NOV-89-056389; EDB-89-089743

**Title: Autonomous reconfiguration of sensor systems using neural nets**

Author(s): Jakubowicz, O.G.; **Weaver, C.B.**

Affiliation: State Univ. of New York (US)

**Title: Sensor fusion**

Series/Collection Title: SPIE - Volume 931

Conference Title: 1. annual national symposium on sensor fusion

Conference Location: Orlando, FL, USA Conference Date: 4 Apr 1988

Publisher: SPIE Society of Photo-Optical Instrumentation

Engineers, Bellingham, WA

Publication Date: 1988 p 197-203

Report Number(s): CONF-8804128-

Language: English

Abstract: Neural networks are ideally suited for sensing images and waveforms, **processing** them into intermediate levels of representation and outputting identification and/or characteristics of the sensed object. These networks can solve problems that conventional algorithms

haven't and already in several cases this new technology has performed better than humans (e.g. sonar signal classification). A brief review of where autonomous agents may use neural networks and their learning algorithms is presented. A high yielding area is seen in the self-repair of damaged or faulted components. Architectures are proposed for implementing self-repairing sensor and identification systems aboard autonomous agents. One example is presented for a system which identifies visual objects. This system has four layers of massively connected simple parallel **processors**. Each connection has a weight attribute and the collected assignment of weights in a layer determines what function the layer will perform. The first layer (the input layer) is simply the pixel detector layer. The second layer has eight sublayers which are sensitive to short line segments in eight different orientations. The third layer detects elementary combinations of the lower lines such as oriented corners or curve segments. The fourth layer has one sublayer for each macroscopic object to be identified which may be fused with a pinpoint location sensor.

**30/3,AB/21 (Item 5 from file: 103)**

DIALOG(R)File 103:Energy SciTec

(c) 2001 Contains copyrighted material. All rts. reserv.

01477511 EDB-84-175319

**Title: Solar residential space and hot water heating in Colorado:**

**economics, market potential, and potential effects on electric demand**

Author(s): **Weaver, C.S.** ; Yogi Goswami, D

Affiliation: Energy Resources Consultants, Inc.

**Title: Solar Engineering -- 1984**

Conference Title: 6. annual ASME Solar Energy Division technical conference

Conference Location: Las Vegas, NV, USA Conference Date: 10 Apr 1984

Publisher: A.S.M.E., New York, NY, USA

Publication Date: 1984 p 357-365

Report Number(s): CONF-840402-

Language: English

**Abstract:** The possibility of widespread use of solar technologies has led to concern about the possible effects of their backup requirements on utility load factors and capacity utilization. This paper reports the results of a project to estimate potential electric demand due to solar backup requirements for one electric utility--Public Service Company of Colorado. The study defined representative combinations of solar and conventional space and water heating technologies in representative residential building types, then projected the extent to which each combination would be employed in new construction. Retrofit construction was not considered in order to limit the scope of the study. Hourly electric demand from one unit of each building/technology combination was then simulated using a **computer** model. Multiplying the electric demand due to one unit by the total number of units projected for each year (with the **application** of a distribution function to account for the asynchronicity of real electrical loads) gave the total estimated backup demand for each year.

**30/3,AB/22 (Item 6 from file: 103)**

DIALOG(R)File 103:Energy SciTec

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00729340 ERA-06-012044; INS-81-004614; EDB-81-037595

Author(s): Chan, T.; Binnall, E.; Nelson, P.; Stolzman, R.; Wan, O.;

**Weaver, C.** ; Ang, K.; Braley, J.; McEvoy, M

**Title: Thermal and thermomechanical data from in situ heater experiments at Stripa, Sweden. Technical Information Report No. 29**

Corporate Source: California Univ., Berkeley (USA). Lawrence Berkeley Lab.

Publication Date: Sep 1980 p 242

Report Number(s): LBL-11477

Contract Number (DOE): W-7405-ENG-48

Language: English

Abstract: Heater experiments were conducted in a granite body adjacent to a recently abandoned iron ore mine at Stripa, Sweden, to investigate the response of a hard rock mass to thermal loading. Heating commenced in June, 1978 and lasted for approximately one year. The rock was heavily instrumented to measure the temperature, displacement, and stress fields. Monitoring of the rock response continued for half a year after the heaters were deactivated. In-situ post-experiment calibrations of instrumentation were completed by June 1980. The enormous data base (approximately 50 million measurements), recorded by a **computer** -based data acquisition system, has now been structured, verified, and converted to engineering units. This report describes the types of data available and the procedures used for data acquisition, transfer, encoding-decoding, reorganization, storage, **processing** , and verification. Information is given on data structure and format and how potential users can access the **computer** -readable data.

30/3,AB/23 (Item 1 from file: 65)  
DIALOG(R)File 65:Inside Conferences  
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01272345 INSIDE CONFERENCE ITEM ID: CN012500658  
**Business Process Redesign and Computer-Based Patient Records: An Integrated Approach**

Weaver, C.

CONFERENCE: Toward an electronic patient record '95-11th International symposium on the creation of electronic health record systems  
TOWARD AN ELECTRONIC PATIENT RECORD -INTERNATIONAL SYMPOSIUM-, 1995; VOL 1 P: 288-292  
Newton, Medical Records Insitute, 1995  
ISBN: 0964066750  
LANGUAGE: English DOCUMENT TYPE: Conference Papers  
CONFERENCE LOCATION: Orlando, FL  
CONFERENCE DATE: Mar 1995 (199503) (199503)

NOTE:

2; vols; Held with the global conference on patient cards

30/3,AB/24 (Item 1 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00300510 93PJ01-021

**The many faces of BASIC: part VI -- Fun and frolic in the new year**

Weaver, Charles

PC Today , January 1, 1993 , v7 n1 p64-68, 5 Page(s)

ISSN: 1040-6484

Product Name: Card; Taxman

Presents a BASIC program listing called Card that is a **computerized** card trick. 21 cards are dealt into three 7-card columns. The player selects a card and tells us in which column the chosen card appears. The cards are then recollected and the **process** is repeated two more times. Then we identify the chosen card. Presents a BASIC program listing called The Taxman that is an interactive tax game. There is no similarity between it and reality. Contains a side-bar article: ''Internal revenue service regulations'' that presents the instructions for the program Taxman. Contains one screen display. (v1)

January 1, 1993

30/3,AB/25 (Item 1 from file: 6)  
DIALOG(R)File 6:NTIS  
Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0843287 NTIS Accession Number: AD-464 023/1/XAB

**Estimating and Detecting the Outputs of Linear Dynamical Systems**

(Technical rept)

Weaver, C. S.

Stanford Univ Calif Stanford Electronics Labs

Corp. Source Codes: 332400

Report No.: TR-6302-7; SU-SEL-64-131

Dec 64 95p

Languages: English

Journal Announcement: GRAI8024

Distribution limitation now removed. NOTE: Only 35mm microfilm is available. No microfiche. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A05/MF A01

This investigation considers three closely related problems: the optimum filtering of stationary or near-stationary random **processes** with unknown parameters from an infinite parameter set; estimation of the state of a linear discrete dynamical system with nongaussian noisy inputs; and **applications** of state estimation theory to detection. The form of the optimum filter when the parameters are unknown is found to have weights that are averages of simple functions of the signal and noise spectra averaged over the parameter space. Practical methods for implementation are given. The key problem is nonlinear statevariable estimation is obtaining the joint density of the states and the observations in a convenient form. (Author)

30/3,AB/26 (Item 2 from file: 6)

DIALOG(R)File 6:NTIS

Comp&distr 2000 NTIS, Intl Cpyrght All Right. All rts. reserv.

0168023 NTIS Accession Number: AD-678 163/XAB

**Digital Filtering with Applications to Electrocardiogram** Processing

(Technical rept)

Weaver, C. S. ; von der Groeben, J. ; Mantey, P. E. ; Toole, J. G. ; Cole, C. A.

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The first part of this paper is a description of the design of lowpass, bandpass, highpass, and notched filter difference equations using Z-transform techniques. The difference equation coefficient word lengths are significantly reduced by using a set of second-order difference equations. These equations have a form that minimizes computation. The second part of the paper contains **applications** of these filters to the **processing** of electrocardiograms (ECG). The filters are included as subroutines in a program that also includes an adaptive muscle tremor filter, an 'optimum' ECG estimator, and optimum estimators for the arrival time of various parts of the ECG waveform. Clinical results are presented. (Author)

30/3,AB/27 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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00122550 PASCAL No.: 73-0000799

**A PHASE-SENSITIVE VAGAL HEART-RATE CONTROL MODEL**

WEAVER C S ; DONG E JR

Journal: J. THEOR. BIOL., 1972, 36 (2) 291-311

Language: ENGLISH

MODELE POUR LE CONTROLE DE LA FREQUENCE CARDIAQUE COMBINANT LE MODELE DE WARNER ET LA MODIFICATION DE L'EQUATION DE HURLEY PAR NOBLE SUR LE TRANSPORT DES IONS DANS LE NERF. SIMULATION SUR ORDINATEUR

30/3,AB/28 (Item 1 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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02466267 Genuine Article#: LD679 Number of References: 18

Title: POTENTIAL APPLICATION OF LASER MICROBE BIOASSAY TECHNOLOGY FOR  
DETERMINING WATER-SOLUBLE VITAMINS IN FOODS (Abstract Available)

Author(s): ANDERSON EM; ANGYAL GN; **WEAVER CM** ; FELKNER IC; WOLF WR; WORTHY  
BE

Corporate Source: USDA,DIV NUTR/WASHINGTON//DC/20204; SRA  
TECHNOL/ALEXANDRIA//VA/22302; NATL INST STAND &

TECHNOL/GAITHERSBURG//MD/20899; USDA/BELTSVILLE//MD/20705

Journal: JOURNAL OF AOAC INTERNATIONAL, 1993, V76, N3 (MAY-JUN), P682-690

ISSN: 1060-3271

Language: ENGLISH Document Type: ARTICLE

Abstract: A microbiological technique was developed for quantitating niacin by determining microbial growth rates in response to the amount of vitamin available. Unlike the current official AOAC method, the new procedure for niacin measured the growth rates during the early exponential growth phase rather than during the stationary phase. *Lactobacillus plantarum* was used to determine niacin to a lower limit of 1 00 pg/mL. The assay time was approximately 6 h, compared with 16-24 h for the current AOAC method. The extent of microbial growth was determined by differential light scattering of a LASER beam. Multiple photodetectors were integrated with a **computer** system to collect and analyze the data. The use of differential light scattering to determine 8 water-soluble vitamins under stationary phase conditions demonstrated the potential **application** of the new technology for microorganisms and foods.

05759227 Supplier Number: 50244506 (THIS IS THE FULLTEXT)

**With the Touch of a Button, Consumers in 10 States and The District of Columbia Can Purchase Progressive Auto Insurance Policies Online**

PR Newswire, p813CLTH003

August 13, 1998

Language: English Record Type: Fulltext

Article Type: Article

Document Type: Newswire; Trade

Word Count: 671

TEXT:

Internet 'Buy Button' introduced in Maryland, District of Columbia and Illinois

CLEVELAND, Aug. 13 /PRNewswire/ -- With the touch of a button, consumers in 10 states and the District of Columbia can now compare rates available to them and **instantly buy** their auto **insurance policies** over the **Internet** at **progressive .com**. **Progressive** (NYSE: PGR), the nation's fifth largest auto insurance company, today announced the introduction of its **Internet 'Buy Button'** capability in three new areas: Maryland, the District of Columbia and Illinois. The feature enables consumers to compare rates available to them from up to four companies, and to buy **Progressive** auto insurance real-time, through the company's Web site, **progressive .com**.

Other states with 'Buy Buttons' include California, Florida, Minnesota, Ohio, New York, Pennsylvania, Texas and Virginia.

" **Progressive** is proud to offer consumers the most functional Web site in the auto insurance industry," said Alan Bauer, Internet process leader at **Progressive**. "As more people begin to rely on the Internet as a important information source and shopping tool, our goal is to make it easy for them to obtain information about their auto insurance policies, shop and compare rates, and make informed purchasing decisions, without leaving their desktops. It's another way **Progressive** can provide consumers with the information they want, in the manner they choose."

In addition to the company's Internet purchasing option, consumers in most U.S. states can visit **Progressive**'s Web site to compare auto insurance rates available to them from **Progressive** and other market leaders. The Internet-based service is identical to **Progressive**'s telephone-based 1-800-AUTO-PRO(R) shopping service.

On the Internet or over the phone, consumers can receive a quote on their auto insurance from **Progressive**, and comparison rates for up to three other leading insurers, including State Farm and Allstate. Independent Agents representing **Progressive** can also help customers understand what other auto insurance companies would charge for the same policy.

Today, **Progressive**'s Web site has more functionality than any other auto insurance company. The company recently added enhanced capabilities to its Web site, including personalProgressive, a new service that enables the company's policyholders to instantly check account status, make real-time payments, access personalized policy information and view their auto insurance policy contract.

Consumers can also visit **progressive .com** to find out about auto insurance and auto safety, including vehicle recalls and safety ratings, or use the site's "Find An Agent" function to find a local Independent Agent who can help them with their insurance needs. In addition, **Progressive** publishes "On the Scene," the first Web-based newsletter produced exclusively for Internet consumers by an auto insurance company.

**Progressive**'s Web site received the "Best of Insurance" award from Financial NetNews, a publication of Institutional Investor, Inc. The publication wrote of **Progressive**'s Web site: "The auto insurer is pushing the envelope in an industry that has largely been slow to go online."

In business since 1937, **Progressive** provides consumers throughout the U.S. and Canada with competitively priced automobile insurance and 24-hour, in-person services via the phone, Internet and more than 30,000 Independent Agents across the country, making it the nation's largest writer of auto insurance through Independent Agents. **Progressive** companies writing auto insurance receive the highest ratings available from A.M. Best, the independent company that rates the financial conditions of

insurance companies. The **Progressive** Corporation's stock is traded on the New York Stock Exchange (NYSE: PGR). More information about the company can be found on the World Wide Web at **progressive** .com.

SOURCE **Progressive** Corporation

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/NOTE TO EDITORS: The company's Maryland, District of Columbia and Illinois. General Managers are available for interviews on this and other auto insurance related subjects. They are: Metro DC: Scott Ziegler, 804-935-9105; Maryland, Ed Combs, 410-277-3738; and Illinois: Richard Hutchinson, 630-705-6336./

/CONTACT: Leslie Kolleda, 904-947-5158, or Donna Marquard, 440-446-2361, both of **Progressive** /

/Web site: [http://www. progressive .com/](http://www.progressive.com/)  
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